CHAPTER 4.0 ENVIRONMENTAL EFFECTS FOUND NOT TO BE SIGNIFICANT

This section of the EIR provides discussions of those effects that were identified as potentially significant during the Initial Study or NOP process but were concluded not to be significant after further analysis.

4.1 Land Use and Planning

4.1.1 Existing Conditions

Project Site and Surrounding Land Uses

Currently, approximately 54 percent of the 389.5-acre Project Site is in active agricultural use with citrus and avocado groves. Scattered throughout the Project Site are 13 agriculture-associated sheds and other structures. Annual grasslands and native vegetation surround the agricultural areas, primarily in the northern and eastern portions of the Project Site. Land to the north and east of the Project Site is undeveloped and consists of citrus and avocado orchards, pasture land, and natural open space.

As described in Chapter 1, the Project Site lies within the community of Fallbrook as designated in the San Diego County General Plan. A portion of the Project Site also lies within the I-15 Corridor Subregional Plan and the 92-acre western vertical strip is included in the I-15/SR-76 MSP. The approved Campus Park/Hewlett-Packard Specific Plan occupies 442 acres immediately west of the Project Site, east of I-15, north of SR-76, and is also within the MSP. At this time, the area is undeveloped open space; however, two development proposals are in the active plan review stage. The Project Site does not overlap the Campus Park/Hewlett-Packard Specific Plan.

4.1.2 Existing Land Use Regulations

The County regulations applicable to the use and development of the Proposed Project are briefly described below. An analysis of the Proposed Project's compliance with these regulatory plans and polices is provided in the following Section 4.1.3, Analysis of Project Effects.

San Diego County General Plan

The San Diego County General Plan is a broad-based planning document that contains text, maps, and diagrams explaining the County's long-range growth and development goals and policies. The adopted General Plan consists of 12 countywide elements: Open Space, Regional Land Use, Circulation, Recreation, Conservation, Seismic Safety, Scenic Highways, Public Safety, Noise, Housing, Energy, and Public Facility.

The Regional Land Use Element includes eight regional categories. The two regional land use categories of SSA and RDA are designated for the Project Site as shown in Figure 4.1-1. The SSA designation occupies the western 92 acres of the Project Site, and the RDA designation occupies the remaining easterly 297.5 acres.

Proposed San Diego County General Plan Update

The County is currently in the process of preparing the General Plan Update, which is a comprehensive update of the adopted General Plan in order to accommodate reasonable population growth. The General Plan Update is in draft form and has not been adopted by the County. However, on January 10, 2001, the County Board of Supervisors endorsed goals and policies prepared by the Steering Committee for use as a guide during the General Plan Update planning process. Also endorsed during the process are a series of land use alternatives, which include updated land use designations for the Fallbrook CP area, including the Project Site. See Section 5, Alternatives, for a discussion of alternatives consistent with the Draft Land Use Map and Referral Map.

Fallbrook Community Plan

The County General Plan provides the basic structure by which the Fallbrook Community Plan is organized. The Fallbrook CP provides more-defined policies and recommendations applicable to development within the community of Fallbrook. The Fallbrook CP was adopted by the County Board of Supervisors in 1974, and amended in 1988. Currently, the Fallbrook CP designates the western 92 acres of the Project Site as (21) Specific Plan Area and the eastern 297.5 acres as (18) Multiple Rural Use (Figure 4.1-2).

I-15 Corridor Subregional Plan and Guidelines

In 1988, the Board of Supervisors adopted a General Plan Amendment to the Fallbrook CP which included the I-15 Corridor Subregional Plan. The defined I-15 corridor extends approximately 20 miles from the Escondido city limits to the Riverside County line, and overlaps the 92-acre western vertical strip of the Project Site. These 92 acres lie within the area designated as (21) Specific Planning Area of the Fallbrook CP (refer to Figure 4.1-2). The corridor contains an approximate two-mile “viewshed” on either side of the freeway in five different community planning areas: North County Metropolitan, Bonsall, Valley Center, Fallbrook, and Rainbow. The text of the plan provides goals and policies for scenic preservation, land use, public services and facilities, circulation, conservation, and coordination and implementation.

I-15/SR-76 Interchange Master Specific Plan

The I-15/SR-76 Interchange MSP is Appendix B of the adopted I-15 Corridor Subregional Plan (discussed above). The MSP Area encompasses approximately 1,178 acres of land located within the four quadrants of the I-15/SR76 interchange. The western 92 acres of the Project Site overlaps a portion of the northeast I-15/SR-76 quadrant, and is the same area designated in the Fallbrook CP as SPA and in the General Plan as regional land use category SSA (refer to Figures 4.1-1 and 4.1-2).

The entire MSP is assigned the zoning designation S90, Holding Area Use Regulation It was anticipated that the MSP would be implemented by component Specific Plans within the area, each of which must comply with the requirements of the MSP. These requirements include the completion of selected studies to identify the detailed needs of the plan area and the appropriate methods to support those needs. The supporting technical studies include a comprehensive San Luis Rey River plan, a traffic study, a

facilities financing plan, a phasing plan, market analysis, implementation guidelines to conform with the General Plan Conservation Element's Dark Sky Policy, design guidelines (that conform to the I-15 Corridor Scenic Preservation Guidelines), and a park and open space study.

County Zoning Ordinance

The San Diego County Zoning Ordinance provides detailed regulatory provisions for development of all unincorporated lands within the County. County zoning is used to implement the goals and objectives of the adopted General Plan in accordance with State law which requires that the General Plan and corresponding zoning be consistent with one another. The current zone on the westerly 92 acres of the Project Site is S90, Holding Area Use Regulations (minimum lot size of 20 acres) and the current zone on the easterly 297.5 acres of the Project Site is A70, Limited Agriculture (net minimum lot size of 2 acres). Figure 4.1-3 shows the existing zoning for the Project Site.

County Subdivision Ordinance

Pursuant to the State of California's Subdivision Map Act, the County's Subdivision Ordinance regulates the division of property in the County. The ordinance addresses design, standards, and required improvements for approval of proposed subdivisions and tentative maps; and requires minimum lot sizes, setback designators, and lot configurations appropriate to support specific land uses.

Resource Protection Ordinance

The Project Site contains wetlands, sensitive biological habitat, steep slopes, floodplains, and historic and prehistoric resources. The RPO establishes special controls on certain discretionary projects for the protection of environmentally sensitive resources, including wetlands, steep slopes, sensitive biological habitats, floodplains, and prehistoric and historic sites. The RPO allows development on sensitive lands "only when all feasible mitigation measures to protect the habitat are required as a condition of approval and mitigation provides an equal or greater benefit to the affected species. Where the Proposed Project has been modified to the greatest extent possible to preserve sensitive habitat, on-site or off-site mitigation may be allowed." Floodplain issues are discussed in Section 4.2.

Natural Community Conservation Plan

The County participates in the NCCP planning process and is committed to the development of MSCPs. The first MSCP was adopted in 1997 and covers the southwestern portion of the county. The second is underway and will cover the northern portion of the county, including the area of the Project Site. The third will cover the eastern portion of the county. Until an MSCP is adopted, sensitive species and habitat resource documentation, impact assessment, and mitigation fall under the guidelines set forth by San Diego County's RPO, the NCCP guidelines, and CEQA. Mitigation would be required for Proposed Project impacts that are considered significant under these guidelines.

4.1.3 Guidelines for the Determination of Significance

For the purpose of this EIR, the basis for the determination of significance is based on CEQA Guidelines, Appendix G. A significant impact to land use and planning would occur if the project would result in a:

1. Direct conflict with applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (i.e., General Plan; Fallbrook CP, including the I-15 Corridor Subregional Plan with its Scenic Preservation Guidelines and I-15/SR-76 Interchange MSP; Zoning Ordinance; Subdivision Ordinance; RPO; and the NCCP), including how the project will meet any General Plan or other County requirements for parks.

2. Physically divide an established community.

4.1.4 Analysis of Project Effects and Determination as to Significance

Proposed Project Inconsistencies with Land Use Plans, Policies, and Regulations (Guideline 1)

A significant impact would occur if the project would conflict with applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (i.e., General Plan; Fallbrook CP, including the I-15 Corridor Subregional Plan with its Scenic Preservation Guidelines and I-15/SR-76 Interchange MSP; Zoning Ordinance; Subdivision Ordinance; RPO; and the NCCP), including how the project will meet any General Plan or other County requirements for parks.

Appendix L of this EIR (San Diego County General Plan Compliance Report for the Proposed Project), includes a detailed assessment of the Proposed Project's compliance with all elements, goals, and policies of the County General Plan, Fallbrook CP (including the Fallbrook Design Guidelines), the I-15 Corridor Subregional Plan (including the I-15 Corridor Scenic Preservation Guidelines), and the I-15/SR-76 MSP. As outlined below and summarized in Section 1.6 of Chapter 1 of this EIR, the Proposed Project is not consistent with the current land use designations contained in the adopted County General Plan, Fallbrook CP, and I-15 Corridor Subregional Plan, or the current use regulations contained in the County Zoning Ordinance. However, as part of the Proposed Project, the applicant will be processing a GPA and Rezone, which would render the Proposed Project consistent with all applicable land use regulations.

<u>San Diego County General Plan</u>

The Project proposes urban land uses and densities that are not consistent with the existing General Plan Regional Land Use Element regional categories of RDA and SSA for the site, and goals pertaining to preservation of rural lands. As part of the Proposed Project, the General Plan Regional Land Use Map is proposed to be amended to remove the existing RDA and SSA regional categories and to re-designate the entire 389.5-acre site as CUDA, Current Urban Development Area (as shown in Figure 4.1-1). By changing the Regional Land Use category to CUDA, the General Plan goals pertaining to non-urban lands would no longer apply to the Project Site as it would be henceforth considered urban land, upon which urban residential land use types and densities would be appropriately suited.

The proposed change in the SSA and RDA regional land use categories for the Project Site to CUDA is supported by evidence of change or proposed change in surrounding land uses. Two Specific Plans have been approved for land west and adjacent to the Project Site that would entail the eventual development of urban uses. The approved Campus Park/Hewlett-Packard Specific Plan occupies 442 acres immediately west of the Project Site, east of I-15 and is designated CUDA. While this area is currently undeveloped open space, two urban-residential development proposals (Campus Park and Campus Park West) are in the active plan review stage (Figure 1-1). Additionally, a campus for Palomar College has been approved within the Campus Park/Hewlett-Packard Specific Plan area. Adjacent to and including part of the Project Site is also the I-15 Corridor Subregional Plan and I-15/SR-76 MSP. These corridor plans are focused on I-15 interchanges and have identified the I-15/SR-76 area as an area of future development.

Adoption of the proposed General Plan Amendment by the County Board of Supervisors (among other actions, as identified in Chapter 1, Table 1-6), to accomplish the necessary change of County Regional Land Use Element land use designation from RDA/SSA to CUDA would render the Proposed Project consistent with the County General Plan regional land use categories and land use goals. Accordingly, impacts associated with inconsistencies with the General Plan would be **less than significant.** Analysis of development consistent with the General Plan Update Draft Land Use Map Alternative and the General Plan Update Referral Map Alternative is provided in Chapter 5, Alternatives, 5.6 and 5.7.

Fallbrook Community Plan

The Proposed Project proposes residential densities that are not consistent with the existing Fallbrook CP (18) Multiple Rural Use land use designation for the eastern 297.5 acres of the Project Site, and therefore, proposes a GPA to change the Fallbrook CP land use designations to (21) SPA for the entire site (as shown in Figure 4.1-2). By changing the land use designation for the eastern 297.5 acres of the Project Site to SPA, the Proposed Project would conform to the Fallbrook CP, and any potential inconsistencies pertaining to development of rural lands would be de facto resolved.

Areas designated SPA require detailed planning prior to development in order to address environmental constraints or unique land use concerns that require special land use and/or design controls. Once land is designated SPA, no major or minor tentative subdivision maps or reclassifications to more intensive zones shall be approved except in accordance with the adopted SPA, as described in Section 65451 of the California Government Code. The Board of Supervisors may adopt by resolution any goals, objectives, or conditions for a SPA that it deems appropriate. Community or Subregional Plans implement the SPA designation by identifying those areas that must have a SPA adopted prior to further subdivision of any lands designated as (21) SPA. For the sake of continuity throughout the project, the Proposed Project includes all 389.5 acres in a Specific Plan Amendment, not just the 92 acres currently designated SPA.

The Proposed Project is located in an area that, together with two other ownerships, has long been planned for urban development. Past approvals have included a Specific Plan for a large office park and urban residential development. The County currently regards this area as one of future development in the proposed General Plan Update.

The proposed General Plan Update shows land use intensities similar to that being proposed.

Adoption of the proposed General Plan Amendment and Meadowood SPA by the County Board of Supervisors would accomplish the necessary change in the Fallbrook CP land use designation to (21) SPA for the entire Project Site and would render the Proposed Project consistent with the Fallbrook CP land use designations and land use goals. Therefore, impacts associated with inconsistencies with the Fallbrook CP would be **less than significant**.

I-15 Corridor Subregional Plan and Guidelines

A detailed assessment of the consistency of the Proposed Project to the goals, policies and guidelines of the I-15 Corridor Subregional Plan, including its Scenic Preservation Guidelines, is contained in Appendix L. As discussed in the appendix, the Proposed Project is concluded to be consistent with the I-15 Corridor Subregional Plan and Scenic Preservation Guidelines. A detailed discussion and analysis of the Proposed Project's consistency is located in Chapter 2.1.1, Aesthetics, of this DEIR. As such, impacts associated with inconsistencies with the I-15 Corridor Subregional Plan and Guidelines would be **less than significant**.

I-15/SR-76 Interchange Master Specific Plan

An evaluation of the consistency of the Proposed Project to the requirements of the I-15/SR-76 Interchange MSP is provided in Appendix L as well as Appendix 1 to the Meadowood Specific Plan Amendment/GPAR. As discussed in the appendix, and summarized below, the Proposed Project is concluded to be consistent with the MSP, given completion of necessary supporting studies.

The MSP includes suggested targets related to the density (1.73 dwelling units per acre), lot size minimums of 15,000 square feet on land with less than 15 percent slope and residential clustering within the plan area. Additional studies are required in the MSP to identify the detailed needs of the plan area and may indicate a need to modify these targets. The Proposed Project exceeds the current MSP targets. According to the MSP, a final land use plan should not be adopted until additional technical studies are completed. These studies are to be carried out by County staff and/or consultants but funded by the land owners within the MSP. The additional studies include: (1) San Luis Rey River Plan; (2) traffic study; (3) a facilities financing plan; (4) a phasing plan; (5) market analysis; (6) Dark Sky Policy implementation procedures; (7) design guidelines for the I-15 corridor; and (8) a park and open space study.

To establish consistency with the MSP, the County has addressed or the Proposed Project applicant has fulfilled or is proposing to fulfill completion of necessary studies, through the project development process. Appendix L contains an assessment of the status of these reports. Below is a summary of that assessment:

1. The County has completed the San Luis Rey River Park Draft Master Plan which identified no constraints to the Project Site.

2. The County, as part of the General Plan Update process, completed a county-wide traffic study that culminated in a proposed update to the Circulation Element

of the General Plan Update. Concurrently, the Proposed Project applicant has completed its own traffic analysis for the project and surrounding area.

3. The County of San Diego and the State of California (Caltrans) have studied the needed public facilities for the Proposed Project area. The applicant, County, and other organizations are scheduled to complete all required facility improvements, as well as to contribute to financing methods appropriate to public facility construction. Scheduled facilities include I-15/SR-76 interchange improvements, widening of SR-76, and extension of Horse Ranch Creek Road and Pala Mesa Drive. In addition, the County has adopted a Transportation Impact Fee (TIF) program for Fallbrook and the North County Region that identify the facilities and improvements necessary for local and regional roads within the Fallbrook area.

4. A phasing plan has been completed and is included in Chapter 1 of this EIR. This plan addresses phasing of proposed private development with the phasing and financing of public facility improvements.

5. The Applicant is prepared to provide a market analysis for Meadowood, showing the type, size, period, and rate of development that can be expected to occur as justification for the Proposed Project. Both SANDAG and the County have recognized and documented residential land shortages within the County. Through the MSP approved for this area, and the County's General Plan Update, as well as other analyses, the Project Site has been identified as a future smart growth area to respond to the housing shortage and impending population influx. The development area is designated by the County's General Plan Update as Village Residential. The Village category identifies areas where a higher intensity and a wide range of land uses are established or have been planned.

6. In its Dark Sky Policy and Light Pollution Code, the County has codified lighting requirements and measures to ensure protection from the effects of light pollution. The tentative maps for the Proposed Project have been designed to comply with these restrictions, and conformance to the Dark Sky Policy and Light Pollution Code must be determined by the County prior to project approval.

7. The Proposed Project design incorporates the I-15 Corridor Scenic Preservation guidelines. Compliance with the Guidelines will be confirmed by the I-15 Design Review Board prior to project approval.

8. The San Luis Rey River Park Draft Master Plan integrated park, open space, and trails for the San Luis Rey River Corridor at the southern end of the Project Site. The County's Community Trails Master Plan and Trail Defense and Indemnification Ordinance further delineates park and open space requirements. The Proposed Project's conformance to these plans must be demonstrated prior to project approval, and an additional park/open space/trails study specific to the Project Site may be required.

In summary, each of the required studies has been addressed through the processing of the Proposed Project. Through completion of the necessary supporting studies, the Proposed Project conforms to the MSP. Determination of completion of these study requirements by the County Board of Supervisors would render the Proposed Project

consistent with the MSP, and accordingly, associated impacts would be **less than significant**.

County Zoning Ordinance

The Proposed Project proposes residential land uses and densities that are not consistent with existing zoning, which includes S90, Holding Area Use Regulations (minimum lot size of 20 acres) for the western 92 acres of the Project Site and A70, Limited Agriculture (minimum lot size of two acres) for the eastern 297.5 acres of the Project Site. The project proposes the construction of a maximum of 886 single-family detached, multi-family attached, and multi-family detached dwelling units at an overall density of 2.3 dwelling units per acre. Uses associated with residential development are also proposed, including school and park sites and wastewater facilities.

As part of the Proposed Project, the applicant will be processing a Rezone to rezone the entire 389.5-acre site to S88, Specific Plan Area, to allow for a maximum of 886 single-family and multi-family dwelling units. Adoption of the proposed Rezone by the County Board of Supervisors (as identified in Table 1-6 of Chapter 1 of this EIR) would render the Proposed Project consistent with the County Zoning Ordinance use regulations. Accordingly, impacts associated with inconsistencies with zoning regulations would be **less than significant**.

Section 4230 of the San Diego County Zoning Ordinance indicates that the purpose of lot area averaging is to allow flexibility in lot size, taking topography into account so as to minimize grading and preserve steep natural slopes and environmental resources. The intent is that the lots shall relate to the topography, neighborhood character, environmental quality, and natural resources, with larger lots or open space to be located in steep areas or in other environmentally constrained areas. The Proposed Project conforms to Section 4230, Lot Area Averaging.

County Subdivision Ordinance

The Proposed Project complies with lot size and layout requirements of the County of San Diego Subdivision Ordinance, and is, therefore, consistent with the Subdivision Ordinance. As such, associated impacts would be **less than significant**.

Resource Protection Ordinance

The Proposed Project does not include any alteration to the San Luis Rey River floodway and has been designed to the greatest extent possible to preserve steep slopes, sensitive habitat and cultural resources, and is consistent with the RPO.

A steep slope analysis prepared for the Proposed Project identified the various slope categories on the Project Site and was used extensively to determine suitable development locations by minimizing development encroachment into the steep slopes and preserving significant slopes. The Proposed Project will preserve 164.1 acres of the 180.3 acres (91 percent) of on-site RPO steep slopes. The minimal areas of encroachment are within the allowances identified in RPO.

The Proposed Project development design also took into consideration locations of sensitive habitat and cultural resources, and the resulting project design avoids sensitive

habitat and preserves 122.4 acres of sensitive habitat in open space. Additional information regarding RPO compliance is contained in the Cultural Resources, Biological Resources, Hydrology, and Parks and Recreation sections of this EIR. As such, impacts associated with inconsistencies with the RPO would be **less than significant**.

Natural Community Conservation Plan

The Proposed Project's open space system is consistent with the goals and objectives of the NCCP, qualifying the Specific Plan Amendment for permitting authority under 4 (d) rule under the NCCP. No direct impacts to habitat occupied by the coastal California gnatcatcher will occur. Indirect impacts to the coastal California gnatcatcher and arroyo toad will be minimized through various construction practices as outlined in Section 3.1 of this EIR and Mitigation and Monitoring Program. The Proposed Project contributes to regional connectivity, does not appreciably reduce the likelihood of survival of MSCP covered species, and minimizes loss of natural habitat. Therefore, the proposed project is consistent with the NCCP and Habitat Loss Permit requirements, and associated impacts would be **less than significant**.

Community Division (Guideline 2)

A significant impact would occur if the project would physically divide an established community.

The existing community of Fallbrook is located west of the Proposed Project and is physically separated from the Project Site by I-15. Because there is not an established community within the project area that would be subject to division, **no impact** would occur.

4.1.5 Cumulative Impact Analysis

Projects that were included in the assessment of cumulative impacts are listed in Table 1-7 and shown on Figure 1-19. This area of the Fallbrook community is characterized by predominantly low-density residential development and agricultural uses. Several other cumulative projects in the Fallbrook CP area propose residential and related development by conversion of agricultural uses into residential use to accommodate the housing needs of the region. The conversion from an agricultural use to residential and related uses was anticipated by the community plan. Projects that require community plan amendments and that conflict with the policies in the plan would have the potential to represent a cumulative land use impact. Specifically, the Proposed Project along with the Campus Park and Campus Park West projects in the northwest quadrant of I-15/SR-76 corridor all require community plan amendments. As noted previously, this quadrant is addressed as part of the General Plan Update, which currently shows increased residential densities beyond that shown in the adopted community plan. While the specific densities and land use designations will be determined through the Draft General Plan Update process, the Proposed Project combined with the other cumulative projects would accommodate the envisioned goals and policies of the update and not represent a cumulatively significant land use impact. Conformance to the community plan demonstrates that a project meets the land use objectives for the growth and development of the community. It is also the goal of the County of San Diego to accommodate growth in a manner that will complement the environment of Fallbrook.

The planned residential densities are compatible with the existing densities in the existing Lake Rancho Viejo project located just south of SR-76, and with the land uses proposed in the adjacent Campus Park and Campus Park West projects. The latter propose a variety of residential densities and housing types, along with compatible commercial, community, and public uses. The Proposed Project's higher densities are clustered in the flatter, western portions of the property, adjacent to the more urban uses in Campus Park and Campus Park West. Natural open space and agricultural uses are located on the northern and eastern portions of the property to ensure compatibility with the existing scattered homes and citrus and avocado groves.

The Proposed Project would not significantly disrupt or divide the established community because the physical arrangement of established development is consistent with surrounding uses and character. The Proposed Project would be consistent with the County of San Diego RPO and the NCCP. Since other projects in the vicinity also conform to the RPO and the NCCP, cumulative impacts would be **less than significant**.

4.1.6 Conclusion

Adoption of the proposed amendments and rezone by the County Board of Supervisors would render the Proposed Project consistent with all applicable land use plans, policies, and regulations. The Proposed Project's consistency with the General Plan goals and policies and Fallbrook CP additionally affirms its consistency with the long-term vision of applicable plans and ordinances. Potential impacts associated with plan inconsistencies would therefore be less than significant.

The Proposed Project entails development of a maximum of 886 single-family and multi-family dwellings where four houses currently exist. No residents would be displaced during the construction phase of the Proposed Project. Additionally, there is no established community within the Proposed Project area that would be subject to division. Therefore, no impacts would occur.

Map Source: Rick Engineering Company, May 2009

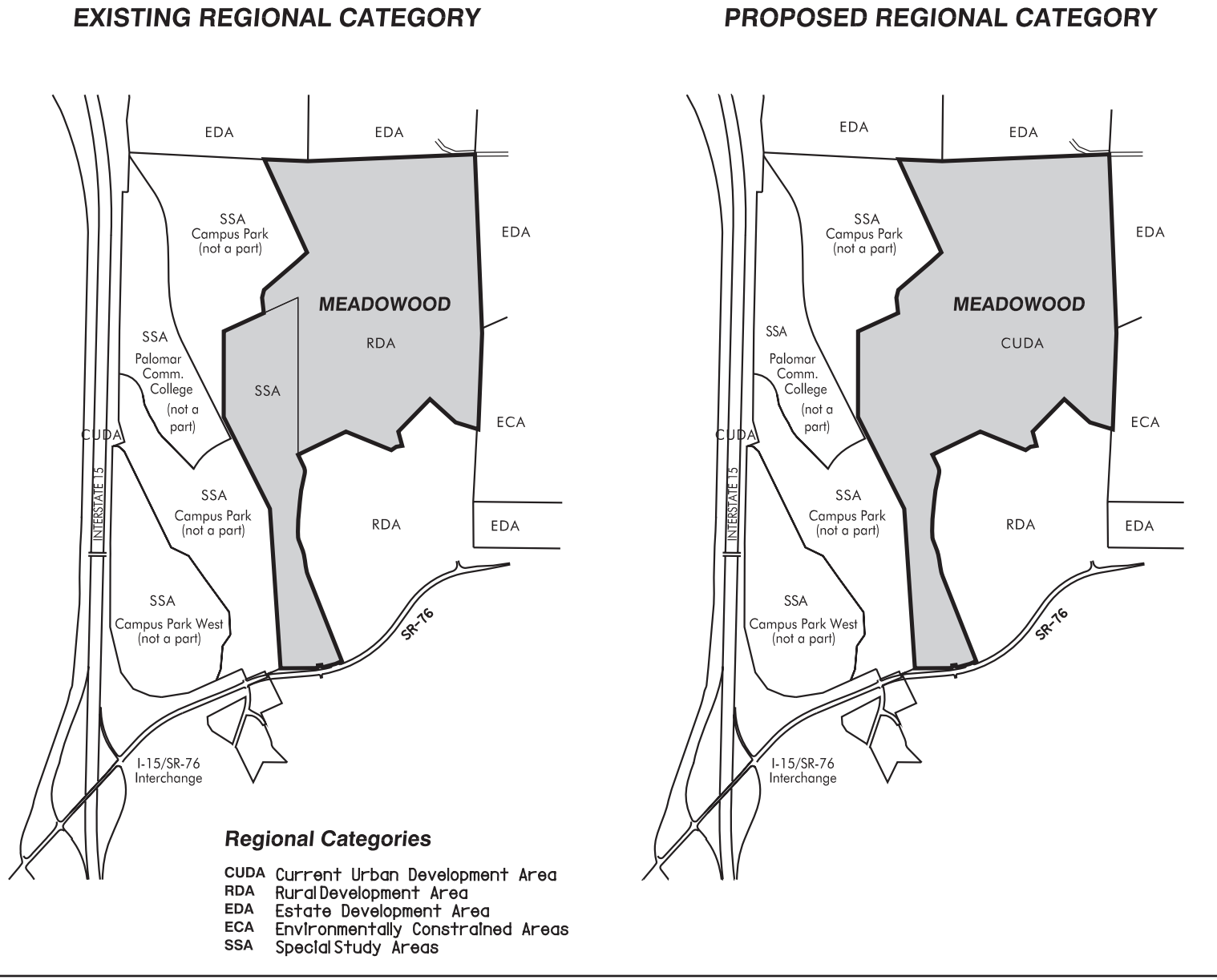

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FIGURE 4.1-1
Existing and Proposed Regional Category

Map Source: Rick Engineering Company, 2009

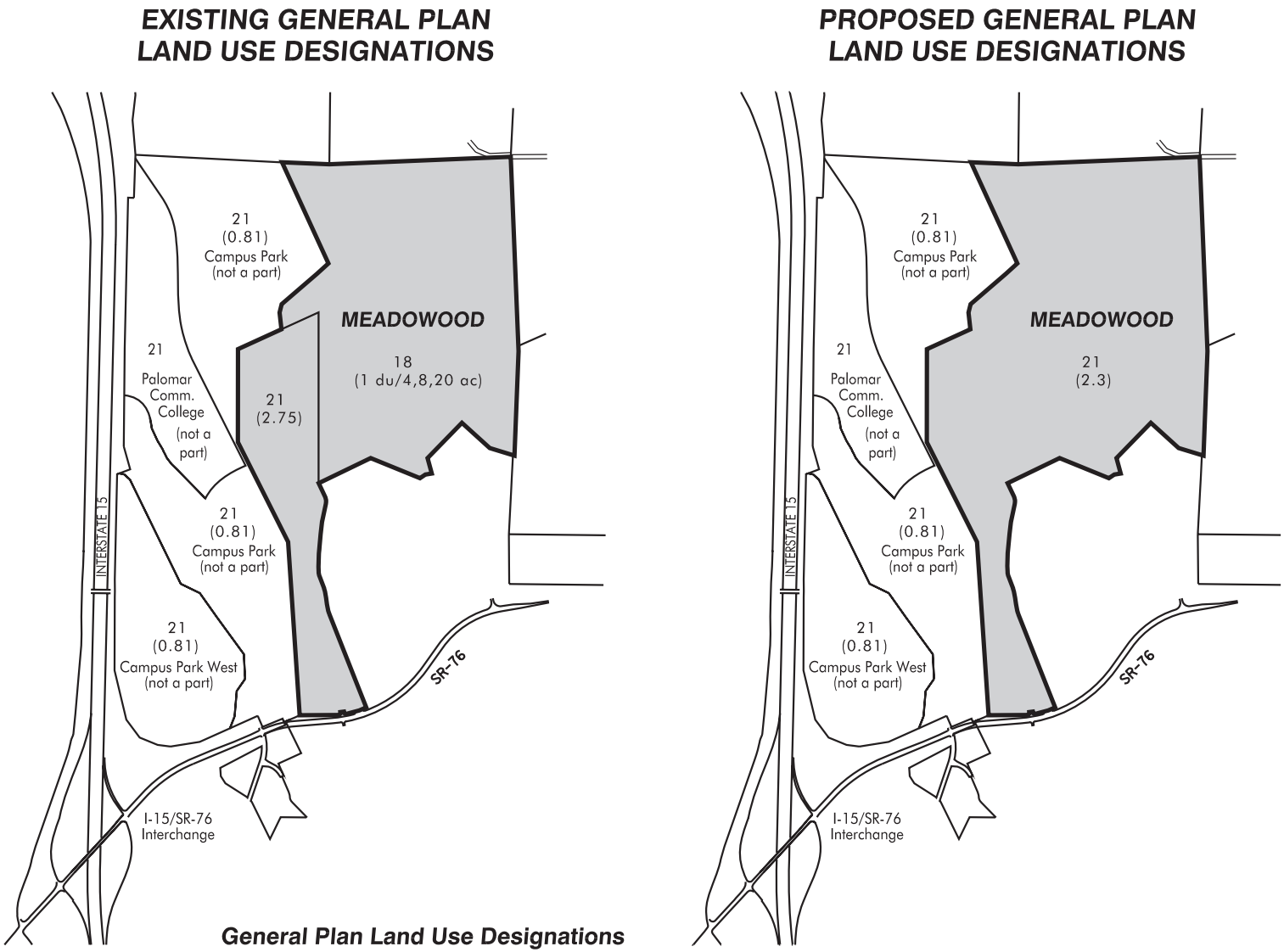

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FIGURE 4.1-2
Existing and Proposed Land Use Desingnations

Map Source: Rick Engineering Company, May 2009

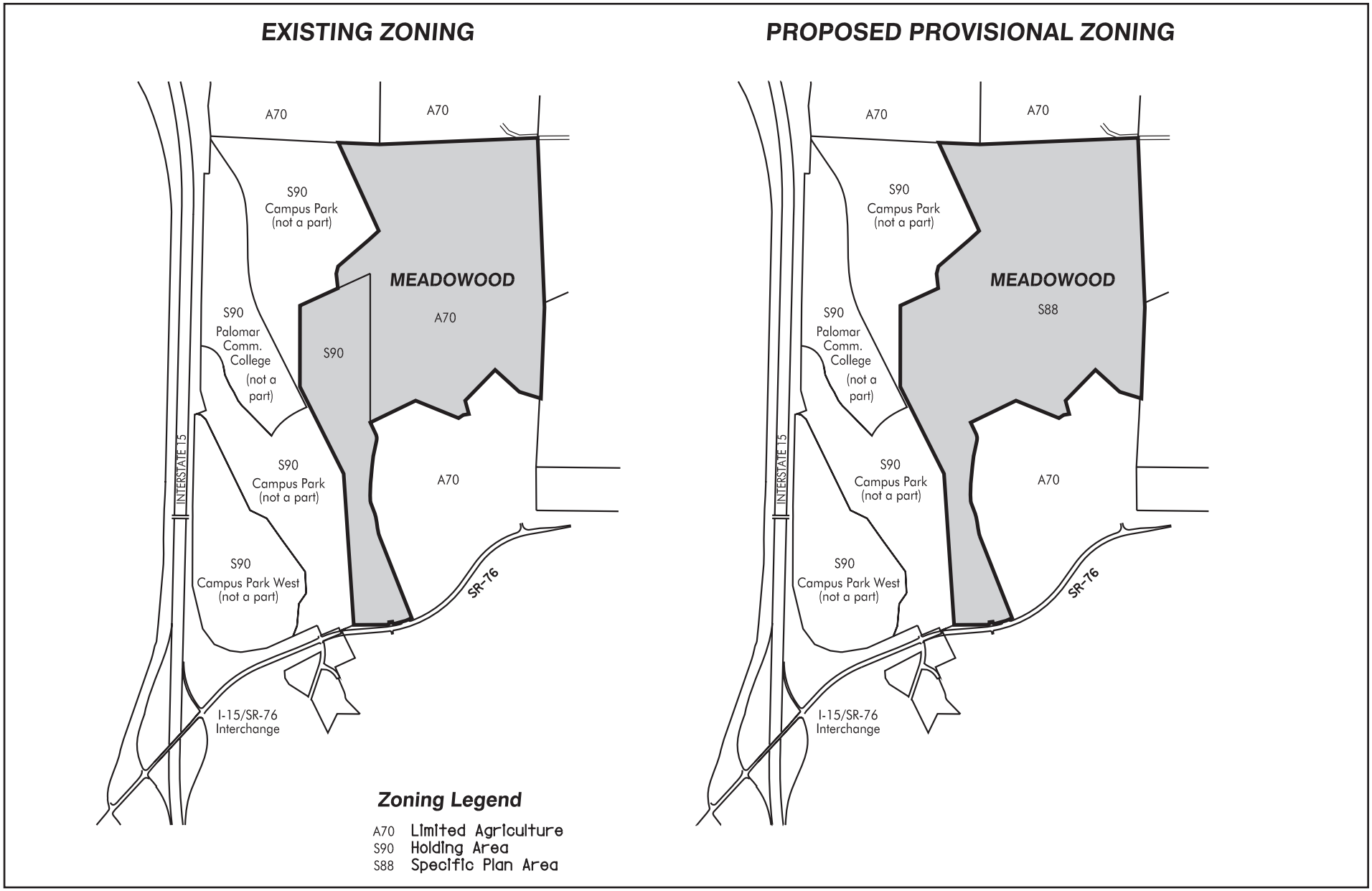

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FIGURE 4.1-3
Existing and Proposed Zoning

4.2 Hydrology and Water Quality

A Storm Water Management Plan (SWMP), Drainage Study and Hydromodification Management Study (HMS) were prepared in April 2009 for the Proposed Project. These studies, along with other applicable information, are summarized below. The studies in their entirety are included as Appendices M-1, M-2, and M-3 of this EIR respectively.

4.2.1 Existing Regulations

Federal Water Pollution Control Act (Clean Water Act, CWA)

The Clean Water Act (CWA), enacted in 1972, is intended to restore and maintain the integrity of the nation's water through a system of water quality standards, discharge limitations, and permits. The fundamental purpose of the CWA is the protection of designated beneficial uses of water resources. The amendment of the CWA in 1987 includes a provision prohibiting discharges of pollutants contained in stormwater runoff and requires many cities to obtain a National Pollutant Discharge Elimination System (NPDES) permit to control urban and stormwater runoff.

Federal Emergency Management Agency (FEMA)

FEMA is the primary agency in charge of administering programs and coordinating with communities to establish effective flood plain management standards. FEMA is responsible for delineating areas of flood hazards. It is then the responsibility of State and local agencies to implement the means of carrying out FEMA requirements.

Porter-Cologne Water Quality Control Act

This Act, which is a portion of the State Water Code, establishes responsibilities and authorities of the State's Regional Water Quality Control Boards (RWQCB). Each RWQCB is directed to adopt water quality control plans for the waters of an area to include identification of beneficial uses, objectives to protect those uses, and an implementation plan to accomplish the objectives.

County of San Diego Watershed Protection, Storm Water Management, and Discharge Control Ordinance (WPO)

The WPO contains discharge prohibitions, and requirements that vary depending on type of land use activity proposed and location within the County. The intent of the WPO is to protect water resources and improve water quality through the uses of management practices aimed at reducing polluted runoff.

4.2.2 Existing Conditions

Local Surface and Water Quality

There is an existing ridgeline within the Project Site which separates the site into two watersheds. The portion located east of the ridgeline is within the San Diego Region watershed, of the San Luis Rey Hydrologic Unit, of the Monserate Hydrologic Area, of the Pala Hydrologic Subarea (903.21). Approximately 71 acres of the Project Site are within Hydrologic Unit 903.21. This area is to remain undisturbed, thus preserving all

existing drainage patterns. The portion of the Project Site west of the ridgeline, is located within the San Diego Region watershed, of the San Luis Rey Hydrologic Unit, of the Lower San Luis Rey Hydrologic Area, of the Bonsall Hydrologic Subarea (903.12). Since Proposed Project development would occur within this watershed, Unit 903.12 is the focus of the following discussion and analysis.

Currently, runoff from the Project Site drains westerly into Horse Ranch Creek. Horse Ranch Creek confluences with the San Luis Rey River which ultimately outfalls into the Pacific Ocean. According to the 2006 CWA 303(d) List of Water Quality Limited Segments Requiring TMDLS, the lower 13 miles of the San Luis Rey River is impaired for chloride and Total Dissolved Solids (TDS). Chloride and TDS levels usually occur from urban run-off/storm sewers being introduced into water systems. The Pacific Ocean shoreline at the San Luis Rey River is impaired for bacteria, which usually occurs from animal wastes.

Beneficial uses for inland surface water within Hydrologic Unit 903.12 include Agricultural Supply (AGR), Industrial Services Supply (IND), Contact Recreation (REC1), Non-Contact Recreation (REC2**),** Preservation of Biological Habitats of Special Significance (BIOL), Warm Freshwater Habitat (WARM), Wildlife Habitat (WILD) and Rare, Threatened, or Endangered Species (RARE)**.** Groundwater beneficial uses at the Project Site include Municipal and Domestic Supply (MUN), AGR, and IND.

Flooding

There are two floodplains adjacent to the Project Site. The Horse Ranch Creek floodplain is located to the west of the Project Site and the San Luis Rey River floodplain is located south of the Project Site. Horse Ranch Creek is not a FEMA defined floodplain; no floodplain and/or floodway have been defined on a Flood Insurance Rate Map (FIRM). San Luis Rey River is a FEMA defined floodplain. The 100-year water floodplain limits are delineated on a FIRM.

The southwestern portion of the Project Site (PA-1) is located within the fringe of the existing 100-year Horse Ranch Creek. As stated above, this floodplain is not defined by FEMA; however, a floodplain analysis has been prepared and is located in Appendix O of this EIR. The southern portion of PA 1 is adjacent to San Luis Rey River. Associated with the re-alignment of SR-76, a Conditional Letter of Map Revision (CLOMR) was submitted to the County and the FEMA. The CLOMR was approved and issued on November 22, 2005 (Case Number 05-09-1045R). Based on the SR-76 re-alignment (now under construction) and the hydraulic analysis, the CLOMR proposes that the northern limit of the San Luis Rey floodplain will be revised to be re-located immediately south of the new SR-76 alignment. As a result, the southern portion of the Project Site is not within the San Luis Rey floodplain. Upon completion of the SR-76 realignment, Caltrans will submit a Letter of Map Revision (LOMR) and formally update the floodplain and the FIRM for this portion of the San Luis Rey River.

Runoff and Drainage

As stated above, a ridgeline exists which splits existing runoff to the east and west. The portion of the Project Site proposed for development is entirely within the western watershed. Runoff is conveyed westerly towards Horse Ranch Creek, which conveys runoff from about 7,300 acres tributary in a southerly direction and crosses SR-76 and

southerly to confluence with the San Luis Rey River. The San Luis Rey River flows westerly, confluencing with Keys Creek from the southeast and then downstream under I-15 and ultimately outlets into the Pacific Ocean.

4.2.3 Guidelines for the Determination of Significance

For the purpose of this EIR, the basis for the determination of significance is based on the County's Guidelines for the Determination of Significance, Hydrology, approved July 30, 2007 and Surface Water Quality, approved July 30, 2007.

A significant hydrology/water quality impact would occur if the project would:

1. Not conform to applicable Federal, State, or local "Clean Water" statutes or regulations, including, but not limited to, the CWA, the Porter-Cologne Water Quality Act, or County of San Diego WPO.

2. Drain to a tributary of an impaired water body listed on the CWA Section 303(d) list, and will contribute substantial additional pollutant(s) for which the receiving water body is already impaired.

3. Contribute pollution in excess of that allowed by applicable State or local water quality objectives or will cause or contribute to the degradation of beneficial uses.

4. Result in placing housing, habitable structures, or unanchored impediments to flow in a 100-year floodplain area, or other special flood hazard area, as shown on a FIRM, a County Flood Plain Map or County Alluvial Fan Map, which would subsequently endanger health, safety and property due to flooding.

   OR

   The project will place structures within a 100-year flood hazard or alter the floodway in a manner that would redirect or impede flow resulting in any of the following:

   a. Alter the Lines of Inundation resulting in the placement of other housing in a 100 year flood hazard;

   OR

   b. Increase water surface elevation in a watercourse with a watershed equal to or greater than one square mile by one foot or more in height and in the case of the San Luis Rey River, San Dieguito River, San Diego River, Sweetwater River or Otay River 2/10 of a foot in height.

5. Substantially alter existing drainage patterns in a matter which would result in substantial erosion or siltation on- or off-site.

6. Result in increased velocities and peak flow rates exiting the Project Site that would cause flooding downstream or exceed the stormwater drainage system capacity serving the Project Site.

4.2.4 Analysis of Project Effects and Determination as to Significance

Local Surface and Ground Water Quality (Guidelines 1, 2, and 3)

A significant impact would occur if the project did not conform to applicable statutes or regulations resulting in the contribution of substantial additional pollutants to an impaired water body listed on CWA Section 303(d) list or result in the degradation of beneficial uses.

Potential water quality impacts are associated with both short-term construction activities and long-term residential use. As stated above, a project specific SWMP has been prepared to address these issues including detailed design, operation and maintenance discussions for short and long-term water quality concerns.

Construction Activities: Proposed Project grading, excavation, and construction activities would increase the potential for erosion and sedimentation both within and downstream of the Project Site. Downstream water quality and associated wildlife habitat could be impacted through the introduction of additional contaminants. Additionally, on-site use and storage of construction related hazardous materials could accidentally discharge resulting in significant impacts to surface water quality if such materials reach downstream receiving waters. The SWMP provides a preliminary list of BMPs which could be included as project design features, the implementation of which would result in the avoidance of accidental discharges and reduce erosion potential and sedimentation.

It is noted that no site specific BMPs for construction activities are identified in the SWMP. A site specified Storm Water Pollution Prevention Plan (SWPPP) will be developed prior to construction pursuant to the NPDES General Permit and applicable County requirements. The SWPPP will identify detailed measures to prevent and control the off-site discharge of contaminants in storm water runoff. These specific pollution control measure will be incorporated into the Proposed Project.

While project specific measures vary with individual site conditions, a summary of typical temporary BMPs that may be used during construction include: street sweeping, waste disposal, vehicle and equipment maintenance, concrete washout area, materials storage, minimization of hazardous materials and proper handling and storage of hazardous materials. Typical erosion and sediment control measures include: silt fences, fiber rolls, gravel bags, temporary desilting basins, velocity check dams, temporary ditches or swales, storm water inlet protection, and soil stabilization measures. Implementation of these measures, or others as determined appropriate in the Proposed Project SWPPP, as design features would reduce potential impacts from construction related activities to the beneficial uses or water quality of receiving waters to be **less than significant**.

Residential Use: Potential long-term water quality impacts associated with the use of the site as a residential community include the generation and discharge of urban contaminants. These contaminants include sediment, trash and debris, nutrients, heavy metals, organic compounds, oxygen demanding substances, oil and grease, bacteria and viruses and pesticides. The SWMP includes Site Design BMPs, Low Impact Development (LID) requirements, Source Control BMPs and Treatment Control BMPs which have been incorporated into the Proposed Project as project design features, the

implementation of which would result in the avoidance or reduction of potential long-term water quality impacts.

Site Design BMPs are those BMPS that the Proposed Project will include as an inherent characteristic of the project's design. As detailed in the SWMP, the Proposed Project is designed to minimize impervious surfaces and conserve natural areas where feasible. Additionally, the Proposed Project includes where feasible the following: runoff from developed areas drain into adjacent landscaping; minimizing cut and fill areas to reduce slope lengths, landscaping the slopes, incorporating retaining walls to reduce steepness or shorten slopes, provide benching or terraces on high cut and fill slopes to reduce concentration of flows, rounding and shaping slopes, and collecting concentrated flows in stabilized drains and channels.

Utilizing LID is a requirement of the WPO. LID is an approach to land development that works with nature to manage stormwater as close to its source as possible. Significant LID measures have been incorporated into the Proposed Project's design as detailed in the SWMP: preserving significant trees; restricting heavy construction equipment access to planned green/open space areas; clustering lot design; curb-cut to landscaping; rural swales; permeable pavements within southern planning areas; downspout swales and utilizing smart irrigation systems and smart trees.

Source Control BMPs are intended to avoid or minimize the introduction of pollutants into the storm drain and natural drainage systems by reducing the potential generation of the pollutant at the point of origin. The SWMP details the Proposed Project's inclusion of the following BMPs as project design measures: storm drain stencils prohibiting dumping, use of efficient irrigation systems including rain shut-off devices, designing systems to meet each landscaped areas specific needs, using flow reducers or shut off valves.

Treatment Control BMPs infiltrate, treat or filter runoff from developed areas. The Proposed Project is divided into nine drainage basins as shown in Figure 4.2-1. In addition to the Site Design, Source Control and LID BMPs described above, the Proposed Project includes seven detention basins and two high rate media filters as the treatment control BMPs. A "settling basin" is a treatment control BMP that collects water allowing it to naturally filter. The high rate media filters are a propriety product that is manufactured by BioClean Environmental Inc. The high rate media filters are a BioClean Inlet Insert with a Biomedia Green Filter. Details of the Site Design, Source Control, and Treatment Control BMPs, in addition to the LID measures, for each drainage basin are included in the SWMP.

The detention facilities have three functions that consist of detaining the 100-year storm to pre-project levels, water quality treatment, and hydromodification management. To be consistent with the County's manuals and water quality language, the detention facilities are identified as "detention basins" in the drainage report, "ponds" in the HMS, and "settling basins" in the SWMP. It is important to note that while the three reports have different terminology for the detention facilities (per the County manuals), all of the detention facilities, with the exception of the underground vault in the most southern drainage basins, incorporate detention for the 100-year storm event, hydromodification management, and water quality treatment. The underground vault, located in the most southerly drainage basin only incorporates hydromodification management. For the

purposes of this section (Local Surface and Water Quality Section), the detention facilities are identified as settling basins.

As stated earlier, the Proposed Project ultimately discharges into the lower 13 miles of the San Luis Rey River, which is an impaired water body. However, implementation of the above described measures, as design features, would reduce potential long-term impacts of the Proposed Project to the beneficial uses or water quality of receiving waters to **less than significant**.

Flooding (Guideline 4)

A significant impact would occur if the project would result in placing housing, habitable structures, or unanchored impediments to flow in a 100-year floodplain area, or other special flood hazard area, as shown on a FIRM, a County Flood Plain Map or County Alluvial Fan Map, which would subsequently endanger health, safety and property due to flooding; or will place structures within a 100-year flood hazard or alter the floodway in a manner that would redirect or impede flow resulting in any of the following:

> a. Alter the Lines of Inundation resulting in the placement of other housing in a 100 year flood hazard; or
>
> b. Increase water surface elevation in a watercourse with a watershed equal to or greater than one square mile by one foot or more in height and in the case of the San Luis Rey River, San Dieguito River, San Diego River, Sweetwater River or Otay River 2/10 of a foot in height.

As discussed above, the Horse Ranch Creek floodplain and floodway is not currently defined by FEMA. Pre- and post-project 100-year floodplain analyses have been performed for the portion of Horse Ranch Creek adjacent to the Proposed Project. As a result, it has been determined that portions of PA1 and Street R are located within the Horse Ranch Creek floodplain. Both PA1 and Street R are located in the portion of the creek that is not in the effective area of conveyance. In addition, improvements will be designed along Street R so that flow is not impeded but rather allow flow to be conveyed downstream and as such not result in adverse impact to the floodplain. The 100-year floodplain analyses show that the Proposed Project would not adversely impact the hydraulic characteristics of the creek with respect to water surface elevations and velocities. Implementation of the improvements associated with Street R and the grading of PA1 will assure that floodplain related impacts associated with the Proposed Project will be **less than significant**.

As mentioned previously, the San Luis Rey 100-year floodplain has been revised based on the recent improvements to SR-76. As a result, the limits of the floodplain have been realigned to the southern side of SR-76 and no longer impact or will be impacted by the Proposed Project.

Runoff and Drainage (Guidelines 5 & 6)

A significant impact would occur if the project would substantially alter existing drainage patterns in a matter which would result in substantial erosion or siltation on- or off-site or result in increased velocities and peak flow rates exiting the Project Site that would

cause flooding downstream or exceed the stormwater drainage system capacity serving the Project Site.

Topographic conditions of the Project Site include steep slopes within the eastern portion of the Project Site generally becoming more moderate from east to west. Existing drainage naturally flows in a westerly direction. In the pre-project condition, the Project Site consists of 389.5 acres of undeveloped land. In the post-project condition, the Project Site would consist of 217.8 acres of development and result in an increase in the area of impervious surfaces. Pre, post undetained, and post detained peak 100-year flow rates for each drainage basin are shown in Table 4.2-1.

TABLE 4.2-1
SUMMARY OF PRE- AND POST-PROJECT HYDROLOGIC ANALYSES

Drainage Basin		100-Year Flow Rate (cubic feet per second)			100-Year Detention Volume (ac-ft)	Drainage Area (acres)	
Pre	Post	Pre	Post (Undetained)	Post (Detained)	Post	Pre	Post
100	1000	20.0	17.8	n/a	n/a	11.2	9.6
200	2000	85.4	108.1	82.0	1.2	62.1	59.5
300	3000	79.1	135.6	79.1	4.00	58.5	61.6
400	4000	16.9	39.3	16.9	1.20	11.1	11.2
700A	7000	257.3	507.1	257.0	16.68	191.3	190.6
700B	7000B	76.2	98.5	74.8	4.00	43.8	45.3
800	8000A	84.8	99.3	84.5	1.89	50.7	26.8
	8000B		80.3		2.81		26.1
900	9000	45.3	45.6	n/a	n/a	21.4	18.3

The Proposed Project has been divided into nine major drainage basins and incorporates two concepts with respect to detention and mimicking pre-project characteristics. First, the Proposed Project would attenuate the post-project flow rates to pre-project levels for the 100-year storm event, where appropriate (seven locations). Second the Proposed Project would mimic pre-project peak flows and durations for the storms equal to 20 percent of the 5-year storm through the 10-year storm (0.2Q5 – Q10), where appropriate (eight locations). The 100-year detention is proposed, so that the watershed or downstream facilities are not adversely impacted as a result of the Proposed Project. By incorporating 100-year detention, the Proposed Project mimics pre-project flowrates and velocities within Horse Ranch Creek. The Proposed Project also manages peak flow rates and durations in accordance with the Interim Hydromodification Criteria to manage increases in runoff and velocities resulting in erosion or siltation. As a result of these two detention components, the Proposed Project would not increase runoff velocities resulting in erosion or siltation on or off-site. The post-project runoff will be detained to pre-project levels, where required, prior to leaving the Project Site due to the inclusion of seven detention basins and one underground vault.

There are nine proposed major drainage basins and as such there are nine proposed locations along the western boundary where runoff would exit the Project Site. Two drainage basins would not exceed pre-project levels during a 100-year storm event.

Detention facilities are proposed in the remainder of the drainage basins. As a result, in the post-project condition, all of the nine locations along the western boundary of the Project Site would release runoff to at or below 100-year pre-project levels. Details regarding the size of the seven detention basin/pond/settling basin and the underground vault (hydromodification management pond) are included in the drainage study, HMS, and SWMP (Appendices M-1, M-2, and M-3).

The underground vault, located in the most southerly drainage basin, only includes volume for hydromodification management. No detention component is necessary, because post-project flow rates do not exceed pre-project flow rates for the 100-year storm. Therefore, in addition to the underground vault, the Proposed Project also incorporates hdyromodification management into the seven detention basins. The seven detention basins, located throughout the project site, in addition to attenuating the 100-year post-project storm to pre-project levels, also incorporate hydromodification management and water quality functions. To be consistent with the language in the local plans, manuals, and ordinances, the drainage study refers to the detention facilities as “detention basins”, the HMS refers to the detention facilities as “ponds”, and the SWMP refers to the detention facilities as “settling basins”.

Due to the implementation of the detention facilities on-site, the Proposed Project would not result in substantial erosion or siltation on or off-site. The detention facilities and the energy dissipaters (where required) would also manage the velocities exiting the Proposed Project. In addition, the hydromodification management component that is associated with the detention facilities (ponds) would reduce the effect of the Proposed Project’s changes to runoff characteristics which could lead to increased erosion and sediment transport off site. Specifically, the Proposed Project would apply the following measures: noncontiguous sidewalks, roof drains not connected to the storm drain system, ponds/detention facilities (discussed above), and porous driveways. Implementation of these measures will assure that potential impacts associated with changes in drainage patterns and increased runoff velocities resulting in substantial erosions and sedimentation would be **less than significant**.

Development of the Proposed Project would require the installation of public and private storm drain facilities to capture and convey off-site and on-site runoff to the westerly boundary of the Project Site. The Project’s outfalls have been proposed in locations that are consistent with the pre-project discharge locations. If the adjacent project (Campus Park TM 5338) is constructed before or concurrent with the Proposed Project, there will be several storm drain systems that will be connected to these downstream off-site storm drain systems. If the adjacent construction occurs, energy dissipaters will not be required at these locations. However, if the Proposed Project develops before the adjacent development, runoff will be discharged along the western boundary to existing swales and channels that discharge into Horse Ranch Creek. Appropriate erosion control measures will be utilized at all discharge points that convey flow overland to Horse Ranch Creek. Implementation of these design measures would reduce run-off volumes and velocities. Therefore, impacts associated with exceeding the existing or planned stormwater facilities will be **less than significant.**

4.2.5 Cumulative Impact Analysis

As discussed above, the incorporation of the detention facilities (detention basins) will mimic pre-project 100-year characteristics with respect to runoff volumes and velocities. The project is mimicking pre-project characteristics at each of the nine outfalls along the

western boundary and as a result not impacting the local drainage patterns. In addition the detention facilities (ponds) and the upstream hydromodification management measures (non-contiguous sidewalks, pervious driveways, roof drains not directly connected to the storm drain, etc.) would mimic pre-project characteristics for 0.2Q5 – Q10 with respect to peak flow rates and durations. The water quality measures that include detention facilities (settling basins), high rate media filters, site design BMPs, source control BMPs, and LID BMPs are incorporated into the project's design to treat the developed runoff. In conclusion, the Proposed Project would incorporate on-site detention facilities and BMPs to managing flood control, hydromodification, and water quality.

The cumulative projects in the vicinity of the Proposed Project are discussed in Section 1.7 "List of Past, Present, and Reasonably Anticipated Future Projects in the Project Area". Each project will be required to implement similar measures to address potential drainage and runoff. Therefore, the Proposed Project will have **less than significant** cumulative impacts to local drainage patterns, runoff volumes and velocities.

Development of the projects listed in Table 1-7 could potentially result in significant cumulative water quality impacts. Through participation in the RWQCB NPDES Municipal Stormwater Permit program and regulations contained in the County WPO, regional water quality control can be achieved. The current requirements are intended to protect receiving water beneficial uses by implementing site specific and watershed-based requirements to meet related water quality objectives on a regional scale. Implementation of the Proposed Project would result in the generation of short- and long-term contaminants, and could contribute to cumulative water quality impacts in down stream waters. As discussed above, these impacts would be reduced to below level of significance on a project level through project design measures, including BMPs; however, because the generation of contaminants could be completely eliminated the Proposed Project would incrementally contribute to cumulative water quality impacts. These cumulative impacts are considered **less than significant** based on the following considerations: 1) all identified project-level water quality impacts would be reduced to below a level of significance through site and project specific design features and conformance with existing regulatory requirements; and 2) the Proposed Project and all applicable past, present and future developments within the watershed are subject to water quality standards identified in the noted NPDES Permit, with those requirements implemented through the County WPO.

4.2.6 Conclusion

The SWMP, Drainage Study and Hydromodification Management Study have all been prepared in accordance with the WPO and other relevant regulations. These studies conclude that the Proposed Project will not significantly alter overall drainage patterns associated with the surrounding area. Sediment discharge will be reduced or eliminated by landscaping open areas and incorporation of on-site detention facilities (detention basins/ ponds/settling basins). Existing slopes and discharge points will not be changed. Construction and post-construction BMPs will be put into place as part of the Proposed Project design to protect water quality and to ensure the use of water for beneficial uses to the maximum extent possible. With design measures (see Table 1-5), BMPs, and conformance with the WPO, direct impacts to hydrology and water quality would be less than significant. Likewise, implementation of the project measures along with participation in and conformance to regional regulations and water quality programs cumulative impacts would also be **less than significant.**

Map Source: Rick Engineering Company, June 2009

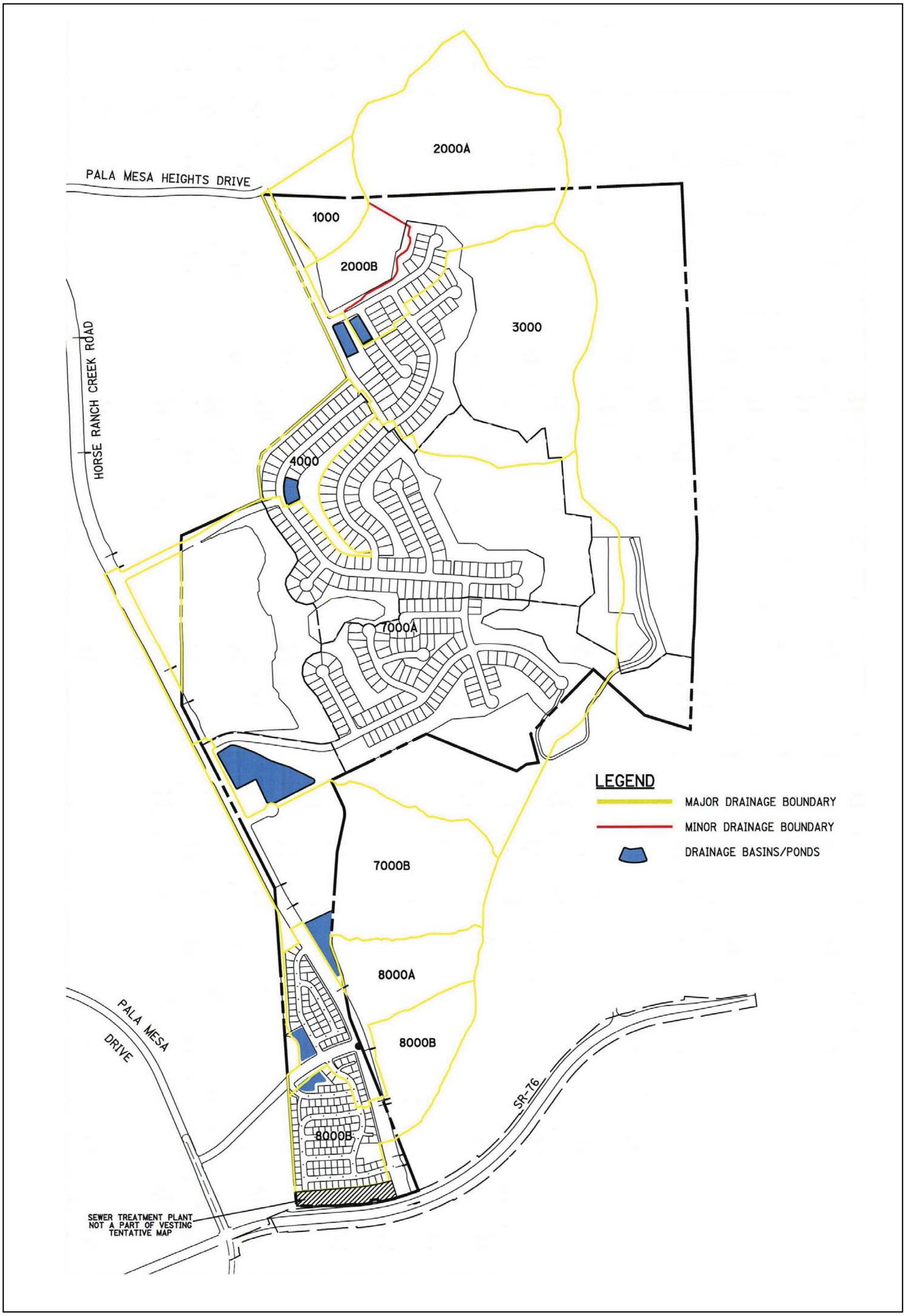

FIGURE 4.2-1
Drainage Features

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4.3 Public Services

Public services include basic support systems necessary for a functioning community. This section of the EIR will address schools, fire and police protection, and solid waste services.

4.3.1 Existing Conditions/Regulations

Schools

The Project Site is served by the Fallbrook Union Elementary School District (K-8) (FUESD), the Bonsall Union Elementary School District (K-8) (BUESD), and the Fallbrook Union High School District (9-12) (FUHSD). Approximately 67 acres of the Project Site lies within the FUESD, while the remaining 323 acres lie within the BUESD (Figure 4.3-1). The entire Project Site is within the FUHSD. Schools within the Proposed Project service area are shown on Table 4.3-1.

TABLE 4.3-1
STUDENT GENERATION RATES FOR SCHOOL DISTRICTS SERVING THE PROPOSED PROJECT

School District	Grades	Current Enrollment	Dwelling Units by Type	Student Generation Rate (student/DU)	Project Student Generation
Bonsall Union Elementary School District	K-8	1,688	SF = 453 MF = 40	SF = 0.4 MF = 0.4	198
Fallbrook Union Elementary School District	K-8	5,800	SF = 80 MF = 285	SF = 0.416 MF = 0.393	147
Fallbrook Union High School	9-12	3,095	SF: 397 MF: 489	SF = 0.195 MF = 0.111	132

SOURCE: BUESD and FUESD from **http://www.sdcoe.k12.ca.us** (2006); FUHSD 2006.
DU = dwelling unit
SF = single-family
MF = multi-family

Bonsall Union Elementary School District

The BUESD consists of two elementary schools, one middle school, and two charter schools. District enrollment in the 2005/2006 school year was 1,688 students.

Fallbrook Union Elementary School District

The FUESD extends from the Pacific Ocean east to I-15 and includes nine schools within the Fallbrook community and two schools on Marine Corps Base Camp Pendleton. The nine schools in the FUESD include seven elementary schools, one middle school, and a home school program. The FUESD schools that will serve the Project Site are Fallbrook Street School (K-2), Live Oak Elementary (3-6), and Potter Intermediate (7-8). Total enrollment for the FUESD 2005/2006 school year was 5,800.

Fallbrook Union High School District

The FUHSD encompasses an area of 130 square miles in the rural communities of Fallbrook, Bonsall, and Vallecitos, as well as the Pala Indian Reservation, Fallbrook Naval Weapons Station, portions of the Marine Corps Base at Camp Pendleton, and a small portion of the city of Oceanside.

FUHSD operates one comprehensive high school, one independent study high school, one continuation high school, and a satellite campus on the Pala Indian Reservation. The district provides public education services for approximately 3,095 students in grades 9 through 12.

Fallbrook High School currently uses 25 portable classrooms. The FUHSD is currently investigating the location for a second comprehensive high school, which will be constructed when issues of growth, location, and funding are resolved (FUHSD 2006).

Fire Protection Services

The County of San Diego General Plan, Public Facility Element, Fire Protection and Emergency Services section addresses the standards and requirements for fire protection and emergency services. Detail of emergency travel time goals and objectives is found in Chapter 3.6, Hazards.

The NCFPD is located in the northern part of San Diego County and bordered by Vista, Oceanside, Camp Pendleton and Riverside County. The NCFPD was formed in December 1986 as a result of the reorganization of the Fallbrook Fire Protection District and the Rainbow County Service area. The Project Site is adjacent to the service boundaries of the NCFPD and is within the NCFPD's SOI. The Project Site is proposed to be annexed into the NCFPD.

The NCFPD provides fire, rescue, advanced life support, and basic ambulance services to a population of more than 45,000 in an area covering 90 square miles, including the communities of Fallbrook, Bonsall, and Rainbow. In addition, the NCFPD provides structural and watershed fire protection and suppression, as well as emergency medical services. The NCFPD also provides emergency medical services for 40 additional square miles outside the primary service area. NCFPD has automatic aid agreements with the Vista and Deer Springs Fire Protection Districts, and mutual aid agreements with the California Department of Forestry and Camp Pendleton and has signed the San Diego County Mutual Aid Pact.

The NCFPD operates out of six fire stations; five staffed with full-time personnel and reserve personnel and one staffed with volunteer personnel. The station closest to the Project Site is located in the Village of Pala Mesa at 4375 Pala Mesa Drive, approximately one and a half miles from the property. The next closest station is the NCFPD Engine Number 6, located at 2309 Rainbow Valley Boulevard. This station is approximately four miles from the Project Site. This station is staffed by volunteers.

The third closest station is NCFPD Engine Number 5, located at 31403 Old River Road. Additional engines can be requested from Pala Reservation Fire Department and California Department of Forestry and Fire Protection engines to respond under either Automatic Aid or the State Mutual Aid Agreement.

Law Enforcement

The San Diego County Sheriff's Department provides generalized patrol services, as well as law enforcement and investigative services, to the unincorporated communities and rural areas within the county, including the Proposed Project. The California Highway Patrol is responsible for traffic safety on highways maintained by the state.

The San Diego County Sheriff Department's Fallbrook Substation, Bonsall Office, is located in downtown Fallbrook, approximately 11 miles from the Proposed Project. This station provides law enforcement services to the communities of Fallbrook, Bonsall, and Rainbow over a 137-square-mile area, including the Project Site.

The Law Enforcement section of the Public Facility Element of the County of San Diego General Plan provides facility standards for the provision of responses to calls for service. Response time is the time it takes a unit to get to the scene of a crime from the moment a call for service is received. Response time is the most meaningful indicator of the adequacy of the level of service. The minimally acceptable response time for urban areas is eight minutes or less for a priority call (calls involving life threatening situations or felonies in progress) and 16 minutes for non-priority calls.

Solid Waste

The Solid Waste section of the Public Facility Element of the County of San Diego General Plan identifies that the San Diego region is served by nine sanitary landfill sites, five of which are the property of the County and administered by the County Department of Public Works. Two sites are under the jurisdiction of the City of San Diego and three are the property of the United States Marine Corps at Camp Pendleton. The City of San Diego operates its landfills with its own work force. The County and Marine Corps contract with a private company to perform the daily landfill operations.

Of the existing sites, five have remaining capacity. These are Miramar, Ramona, Sycamore, Otay, and Borrego Landfills. In addition, the proposed 1,770-acre Gregory Canyon landfill site, located in northern San Diego County on SR-76, approximately three miles east of I-15 and two miles southwest of the community of Pala, would serve the project area. Currently, the RWQCB is reviewing the Gregory Canyon Landfill for its permitting process. Once the proposed Gregory Canyon Landfill is active, the Proposed Project will utilize this new landfill facility for solid waste management.

4.3.2 Guidelines for the Determination of Significance

For the purpose of this EIR, the basis for the determination of significance is the County of San Diego General Plan, Public Facilities Element, San Diego County Fire Protection District; San Diego County Sheriff's Department; BUESD; FUESD; FUHSD; and other local, regional, and state standards, plans, policies, and regulations; and CEQA Guidelines regarding adequate levels of service.

A project will have a significant adverse environmental effect related to public services systems if:

1. The development results in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or

physically altered governmental facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives as included in the Public Facility Element of the General Plan.

4.3.3 Analysis of Project Effects and Determination as to Significance

Overall, the residential development of the Proposed Project will add demands on public safety and service providers. The Specific Amendment Plan Public Facility Element was created to ensure that these facilities are present to support residential development within the SPA.

Schools

The Proposed Project has received a 'will serve' letter from both the BUESD and the FUESD. As identified on Figure 4.3-1, the boundary between the BUESD and the FUESD runs through the middle of the Project Site. The Proposed Project would result in the construction of 355 single-family and 531 multi-family residential units. Based on that housing mix, the Proposed Project will generate approximately 336 elementary students (K-8), 191 in the BUESD and 145 in FUESD. In addition, approximately 124 high school students would be generated by the Proposed Project within the FUHSD (see Table 4.3-1).

The Proposed Project includes a 12.7-acre site for the construction of an elementary school within BUESD. The proposed elementary school would serve the 191 additional students. The 145 students generated within the FUESD would be served by one of the following existing schools: Fallbrook Street School (K-2), Live Oak Elementary (3-6), and Potter Intermediate (7-8). Since there are sufficient facilities to serve these additional students, impacts to school services for the BUESD and FUESD would be **less than significant**. If the BUESD chooses not to build a school in this location, an additional 42 dwelling units may be built. In that case, the school fees required to be paid upon receipt of building permits can go toward the improvement of the other existing schools within the BUESD. Therefore impacts would be **less than significant**.

Fire Protection Facilities

As noted above, the Project Site is adjacent to the boundaries of the NCFPD. The NCFPD has provided a 'will serve letter' as well as detailed fire protection development standards concerning roadway width, secondary access, fuel modification zones, water supply, and fire hydrant spacing. These standards, detailed in the FPP have all been incorporated into the Proposed Project as design measures and are required as part of implementing permits conditions.

Section 11 of the General Plan – Public Facility Element states that the first arriving fire truck should be at the scene within five minutes. An NCFPD station is located on the southwest corner of Pala Mesa Drive and Old Highway 395. Pala Mesa Drive will be improved from the existing bridge crossing I-15 to the project site via Street R, as well as a northward extension of Street D to Pala Mesa Heights Road. Additionally, emergency access to Rice Canyon via a northeasterly extension of Street E is included in the Proposed Project's circulation plan. Based on the information provided by NCFPD, construction of these roadways will ensure that emergency services response time will

be within five minutes for the furthest dwelling unit. Therefore, impacts associated with fire protection services and response time will be **less than significant**.

Since the Proposed Project is located in an area of considerable wildlands, the site is subject to wildfires. To address this, the Proposed Project incorporates fire protection standards and a conceptual fuel modification plan pursuant to the FPP. These are addressed within Section 3.6 of this document.

Law Enforcement

The Sheriff's Department has indicated that future response times to the Proposed Project cannot be accurately estimated, as they depend on such factors as type of call, call priority, previous calls pending, time of day, location of squad car and amount of traffic. The Proposed Project has received a letter from the Sheriff's Department dated June 5, 2006 indicating that the project would not impact response time or law enforcement services. Therefore, direct law enforcement service impacts would be **less than significant.**

Solid Waste

Development of the land uses proposed for the Proposed Project would place additional demands on solid waste facilities. However, there is sufficient solid waste capacity to accommodate the Proposed Project's disposal needs. The Proposed Project will deposit waste at a permitted waste facility in compliance with federal, state, and local statutes and regulations related to solid waste. Impacts will be **less than significant.**

4.3.4 Cumulative Impact Analysis

The Proposed Project, in conjunction with other projects in the area, will place an added demand on public services. A list of cumulative projects considered in developing the cumulative impacts is discussed in Section 1.7 of this EIR.

As indicated in the letter from the Sheriff's Department dated June 5, 2006, the Proposed Project, in combination with the surrounding cumulative projects, will require the need for a new Sheriff's station. To plan for future growth, the Sheriff's Department completed the Law Enforcement Facilities Master Plan (2005) (LEFMP). In addition to assessing the existing conditions of County law enforcement facilities, the LEFMP, using population projections prepared by SANDAG, recommended the construction of a new station along the northern section of the I-15 corridor (Mays, personal communication, 2006). Facilities identified in the LEFMP are prioritized into categories one through four; the new facility to be located in the I-15 corridor is listed as a priority four with an approximate occupancy date of 2019. At this time, the County has not yet designated a site or acquired property for a future station. However, based upon discussion with the Sheriff's Department, the preferable future location would be south of SR-76, possibly within the Campus Park West project site.

The cumulative impacts analyzed within this EIR, analyze those impacts that are reasonably foreseeable by the construction of a Sheriff's station at the Campus Park West project site. The Campus Park West project is included in the list of cumulative projects discussed in Section 1.7 of this EIR. Environmental impacts associated with the development of Campus Park West, including civic uses permitted within the commercial

land use designation, are analyzed within the cumulative discussions in Chapter 2.0 and 3.0 of this EIR. **No further impacts are identified**.

As discussed above, the Proposed Project would not result in significant impacts to the provision of school, fire protection, law enforcement, and solid waste services. In addition, prior to the issuance of building permits for all projects approved by area lead agencies, design measures will be incorporated into the project to reduce significant impacts to public services to below a level of significance (e.g., providing the service, contributing to pro-rata share, participating in an assessment district, etc). With implementation of these features, cumulative impacts to the provision of public services would be **less than significant**.

4.3.5 Conclusion

Impacts to public services from the Proposed Project will be less than significant. Implementation of the proposed design measures listed in Table 1-5, will ensure the availability of adequate public services for the Proposed Project.

Schools

BUESD, FUESD, and FUHSD have indicated they will be able to serve the projected student population associated with the Proposed Project. In addition, the Proposed Project includes 12.7 acres designated as a school site to serve the projected increase in student population within the BUESD. Therefore, impacts to school services will be less than significant.

Fire Protection Services

The Project Site is proposed to be annexed to the NCFPD which has the capacity to serve the site. In addition, the Proposed Project includes a FPP with requirements for future development. The FPP and fuel modification zones are discussed in more detail in Section 3.7. The internal roadway system included as part of the Proposed Project's design will assure that emergency service response time is adequate. Therefore, impacts to fire protection services would be less than significant.

Law Enforcement

The Proposed Project has received a letter from the Sheriff's Department dated June 5, 2006 indicating that the Proposed Project would not impact response time or law enforcement services. Therefore, direct law enforcement service impacts would be less than significant.

However, as discussed above, the Proposed Project, in combination with the surrounding cumulative projects, will require the need for a new Sheriff's station. Although a specific site has not been chosen, the preferable future location would be south of SR-76, possibly within the Campus Park West project site. The cumulative impacts analyzed within this EIR, analyze those impacts that are reasonably foreseeable by the construction of a Sheriff's station at the Campus Park West project site. The Campus Park West project is included in the list of cumulative projects discussed in Section 1.7 of this EIR. Environmental impacts associated with the development of Campus Park West, including civic uses permitted within the commercial land use

designation, are analyzed within the cumulative discussions in Chapter 2.0 and 3.0 of this EIR. Therefore, no further impacts are identified.

Solid Waste

There is adequate capacity at area landfills which will be augmented by activation of the proposed Gregory Canyon Landfill to meet the Proposed Project's solid waste management needs. Therefore, impacts will be less than significant.

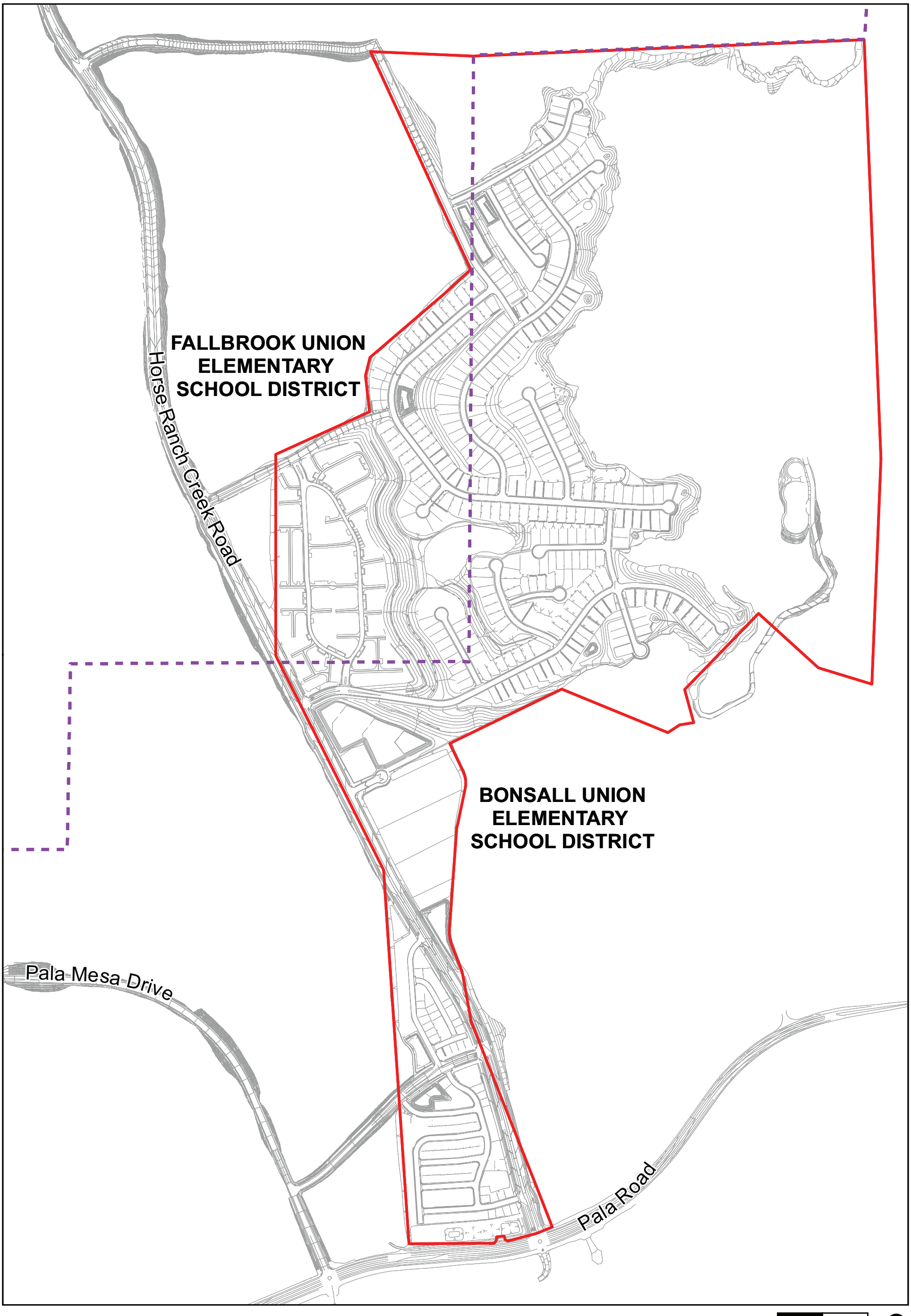

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FIGURE 4.3-1

School Site Boundary

4.4 Population and Housing

Currently, there are four houses on the Project Site. These would be demolished and replaced with 886 new single- and multi-family residences. Since the existing units would be replaced by a greater number of units, the Proposed Project would not displace a substantial numbers of existing housing or substantial numbers of people, necessitating the construction of replacement housing elsewhere.

According to SANDAG, San Diego County currently lacks affordable housing. The region faces a housing crisis because construction is not keeping up with demand and the costs of owning and renting housing within the County is beyond the ability of many people to make housing payments (SANDAG 2001). Because of housing shortages and the high cost of home prices, many of the County's employed reside in more affordable areas outside the regions in which they work, leading to long commutes. These long commutes contribute to increased traffic congestion, air pollution, and energy consumption. Those who do stay in the region often pay more than they can afford for housing and may live in overcrowded housing situations.

The Proposed Project would provide the addition of 886 housing units that would be located in an area identified by the SANDAG Smart Growth Concept Map as a potential Special Use Center smart growth area. Refer to Section 1.8, Growth Inducing Analysis for details. The quadrant northeast of I-15 and SR-76 also includes the Campus Park, Campus Park West, and Palomar College projects. The Proposed Project and Campus Park combined would provide up to 1,058 multi-family housing units which would be relatively affordable. The Proposed Project, in conjunction with the other three projects in the quadrant, would provide jobs, housing, retail, and recreational opportunities within walking distance of one another and within close proximity to transit service. This would aid in addressing the air quality, traffic, increased energy consumption, and commute time impacts associated with single-use development types.

The San Diego County General Plan, Fallbrook CP, and the Meadowood Specific Plan Amendment acknowledge the Campus Park, Campus Park West, and Palomar College developments in conjunction with the Proposed Project. All of this development is addressed in these planning documents, which consider the population growth and housing concerns in relation to development proposed by the Proposed Project. As the Proposed Project would provide 886 single- and multi-family housing units, and would not displace any housing, impacts to population and housing would be **less than significant**. The potential for the Proposed Project to induce substantial population growth in an area is addressed in more detail in Chapter 1.8.

4.5 Mineral Resources

The following discussion of mineral resources within the Proposed Project is based on the Mineral Resource Technical Report that was prepared by Leighton and Associates in April 2009 (Appendix N).

4.5.1 Existing Conditions/ Regulations

Geology

Gabbroic rock outcrops dominate the elevated areas at the site, while sedimentary deposits comprise the lower-lying areas of the site. The primary bedrock unit on-site is Cretaceous-aged Gabbroic rocks. Alluvial (floodplain) and colluvial (slopewash) deposits are mapped in the flatter lower-lying slopes through the central and southwestern portion of the Project Site. The generalized geologic map units are illustrated as shown on Figure 3.3-1, based on mapping published by the California Geologic Survey (CGS 2000a and 2000b). The geologic units are discussed in further detail in Section 3.3 (Geology and Soils).

Mineral Resource Zones

As mandated by the Surface Mining and Reclamation Act of 1975, the California State Mining and Geology Board classifies California mineral resources with the Mineral Resource Zones (MRZs) system. These zones have been established based on the presence or absence of significant sand and gravel deposits and crushed rock source area, e.g., products used in the production of cement. The classification system emphasizes Portland Cement Concrete (PCC) aggregate, which is subject to a series of specifications to ensure the manufacture of strong durable concrete. The following guidelines are presented in the mineral land classification for the region:

- MRZ-2 - Areas where adequate information indicates that significant mineral deposits are present or where it is judged that there is a high likelihood for their presence.

- MRZ-3 - Areas containing mineral deposits, the significance of which cannot be evaluated from available data. In contrast to MRZ-2 areas where it has been judged that there is a high likelihood of minable, marketable mineral deposits (notably Portland cement and asphaltic concrete aggregate), MRZ-3 areas are areas where the data is not sufficient to evaluate the significance of any potential aggregate deposit.

- MRZ-4 - Areas where available information is inadequate for assignment to any other MRZ zone.

Mineral Resources on the Project Site

The extent of zones classified as MRZ-2 in the vicinity of the Project Site is identified on Figure 4.5-1. The MRZ-2 zone trends east to west and roughly follows the same geographic area as the San Luis Rey River drainage area, which includes a relatively thick accumulation of alluvial deposits, with an irregular, organic boundary defined by the

low-lying topographic drainage margin. This includes 5.8 acres of the southernmost portion of the Project Site. Geologically, this area is generally characterized by the presence of younger (Quaternary-aged) river channel, floodplain, and terrace deposits that have been eroded from the older (Tertiary to Cretaceous-aged) bedrock units, transported, and redeposited. They consist of naturally loose mixtures of sands and rounded gravels.

Approximately 101 acres of the western edge of the Project Site are mapped as MRZ-3. Approximately 33.2 acres of this area is likely to contain young alluvial deposits. The total 39 acres of younger alluvium (approximately 33.2 acres mapped as MRZ-2 and 5.8 acres mapped as MRZ-3) can be considered to be correlative with the alluvium identified as MRZ-2 in Sectors C and D to the south within the San Luis Rey River Drainage. Site-specific laboratory testing has not confirmed the physical and chemical characteristics of the on-site alluvial deposits are appropriate for PCC-grade aggregate. However, successful sand and gravel mining operations of PCC-grade aggregate are well documented along the San Luis Rey River drainage in the MRZ-2 areas.

The rest of the western portion of the Project Site is mapped MRZ-3, and contains older alluvial terrace deposits which contain more fines and are less minable and marketable than adjacent known deposits. In addition, the weathered mafic gabbroic rocks of the Project Site hillsides which are not designated as a mineral resource zone are differentiated from adjacent areas known to be MRZ-2, such as the San Luis Rey alluvium, as well as the leucratic granodiorite comprising the adjacent Rosemary's Mountain.

In summary, the Project Site is underlain by approximately 39 acres of young alluvial deposits. Approximately 5.8 acres of these deposits are mapped as MRZ-2 with the remainder mapped as MRZ-3. The rest of the Project Site is underlain by weathered gabbroic rock and older alluvial deposits, and not considered likely as a high quality aggregate source. Thus, with the exception of 39 acres of younger alluvial floodplain deposits in the southernmost portion of the site, the majority of the Project Site is not underlain by geologic units traditionally known as desirable, marketable sources units of sand or aggregate suitable for asphaltic concrete or Portland Cement Concrete.

Mineral Resources in the Project Area

San Luis Rey River floodplain deposits (mapped as Qa) directly to the south of the Project Site are mapped as MRZ-2 and are also considered to be significant mineral resource deposits. The greater San Luis Rey River Valley has been identified as a valuable resource area containing an estimated 1.6 billion tons of sand and 1.2 billion tons of coarse aggregate through the 14,607-acre drainage basin.

There are several documented historical aggregate extraction operations in the project area as described below. All but one, the Pankey Ranch/Rosemary Mountain site, has been terminated.

- **Fenton Sand Mine.** A short distance east of the Project Site is the Fenton Sand Mine which originated as a 27-acre sand mine initially permitted in 1969. In 1975 a 30-year Major Use Permit (74-088) was granted to allow extraction from an expanded 211-acre area. It was operated by the H.G. Fenton Company through November of 1998, when Hanson Aggregates assumed responsibility of the operation. Hanson closed the sand and gravel processing plant as of September 15, 2005.

- **Pankey Pits.** The closest known historical aggregate extraction operation is located to the southeast of the site, closer to the San Luis Rey River. This property was originally known as the Pankey Pits, where the Marron Brothers extracted sand and gravel from the San Luis Rey River drainage. Like many in-stream operations, permitting processes and regulations became increasingly difficult, and the site was entirely inactive by the early 1990s.

- **Pankey Ranch/Rosemary's Mountain.** In the late 1980s Palomar Grading and Paving acquired a lease on the Pankey Ranch, an elevated hillside immediately north of the Pankey Pits historically operated within the San Luis Rey River. The approximate 100-acre site is a small peak known as Rosemary's Mountain, ranging in elevation of approximately 300 to 990 feet (see Figure 4.5-1). In 1989, Palomar submitted a petition to the State of California Division of Mines and Geology for a reclassification of the MRZ-3 zoned property to MRZ-2. The Granite Construction Company has since partnered with Palomar on the project, and a Major Use permit has been obtained. Plans for the rock crushing, extraction of aggregate and operation of an asphalt plant on 38 acres of the 94-acre site, are in progress.

4.5.2 Guidelines for the Determination of Significance

The basis for the determination of significance is based on the County's Guidelines for Determination of Significance, Mineral Resources, adopted July 30, 2008. A significant impact would occur as a result of project implementation if:

1. The project is:

   - On or within the vicinity (generally up to 1,300 feet from the site) of an area classified as MRZ-2; or
   - On land classified as MRZ-3; or
   - Underlain by Quaternary alluvium; or
   - On a known sand and gravel mine, quarry, or gemstone deposit;

   AND

   The project will result in the permanent loss of availability of a known mineral resource that would be of value to the region and the residents of the state;

   AND

The deposit is minable, processable, and marketable under the technologic and economic conditions that exist at present or which can be estimated to exist in the next 50 years and meets or exceeds one or more of the following minimum values (in 2005 dollars):

- Construction materials (sand and gravel, crushed rock) $15,000,000*
  *Updated to 2008 dollars.

- Industrial and chemical mineral materials $3,000,000
  (limestone, dolomite, and marble [except where used as construction aggregate]; specialty sands, clays, phosphate, borates and gypsum, feldspar, talc, building stone, and dimension stone)

- Metallic and rare minerals $1,500,000

4.5.3 Analysis of Project Effects and Determination of Significance

A significant impact would occur if the project is within an area of mineral deposit, and would result in the permanent loss of availability of a known mineral resource that would be of value to the region and the residents of the state, and the deposit is minable, processable, and marketable under the technologic and economic conditions as described above.

The County Report Format requires three separate analyses of land use compatibility as follows:

1. On-site impacts to mineral resources from existing and proposed intended on-site land uses

2. On-site impacts to mineral resources after taking into consideration existing off-site noise sensitive land uses

3. Proposed on-site land use impacts to off-site MRZ-2 designated lands within 1,300 feet of the project site

The County Guidelines provide that 1,300 feet is generally considered the setback from residences necessary to achieve adequate separation from noise, dust and other characteristics generated by aggregate extraction and processing. Areas within this 1,300 feet setback (buffer zone) are considered incompatible with future mining.

On-site Impacts from Proposed On-site Land Uses

This analysis focuses on the impact of the Proposed Project and its existing and intended land uses to on-site mineral resources. As previously discussed, approximately 39 acres of younger alluvial floodplain deposits (mapped as Qa) in the southernmost portion of the Project Site are the only on-site geologic unit traditionally known as containing desirable, marketable source units of sand or aggregate suitable for asphaltic concrete or Portland Cement Concrete.

The Mineral Resources Technical Report determined that the entire 39 acres of on-site floodplain deposits are located on or within 1,300 feet of existing residential properties on the Meadowood site and as a result are already lost to future mining. Therefore, implementation of the Proposed Project would not result in any additional impacts to these resources: on-site Impacts would be **less than significant**.

On-site Impacts from Off-site Land Uses

Since all on-site mineral resources were determined to be incompatible or lost to future mining due to the presence of existing residences on the Project Site, impacts would be **less than significant**.

Off-site MRZ-2 Impacts from Proposed On-site Land Uses

A single-family residence is located on-site just north of SR-76. A 1,300 foot buffer from the property line of this residential parcel effectively precludes the ability to mine within MRZ-2 designated lands off-site. Implementation of the Proposed Project would result in the same 1,300 feet radius to the south and will not impact any additional mineral resources since they are already lost from existing on-site residential properties.

Rosemary's Mountain quarry is located directly east of the project site and is mapped as MRZ-2. The existing on-site residential property and the project buffer zone directly west of Rosemary's Mountain reaches into MRZ-2 designated land on Rosemary's Mountain. The Proposed Project is anticipated to impact approximately 13 acres of MRZ-2 land on Rosemary's Mountain. However, the proposed quarry on Rosemary's Mountain would conduct all mining activities on the east facing slope of the mountain, which shields it from the Project Site. Expansion of the Rosemary's Mountain quarry may be precluded by the County's noise setback requirements due to the presence of the existing residence within 1,300 feet of the quarry and by the conditions of approval imposed by the County on the operation of the quarry. Off-site MRZ-2 Impacts from Proposed On-site Land Uses therefore would be **less than significant.**

Marketability and Minimum Dollar Value

The on-site and off-site mineral resources within 1,300 feet of the Project site mapped as Qa and/or MRZ-2 are considered minable, processable, and marketable since this resource is considered to be a high quality (PCC grade) aggregate source, which would be of value to the region. However, the land use compatibility analysis indicates that the entire 39 acres of the Project Site mapped as Qa and off-site MRZ-2 designated land is located on or within 1,300 feet of existing residential properties on the Meadowood site. Therefore, it is considered incompatible or lost to future mining. Implementation of the Proposed Project would not result in any additional impacts to these resources. As such, there would be no economic impact to mineral resources: impacts would be **less than significant**.

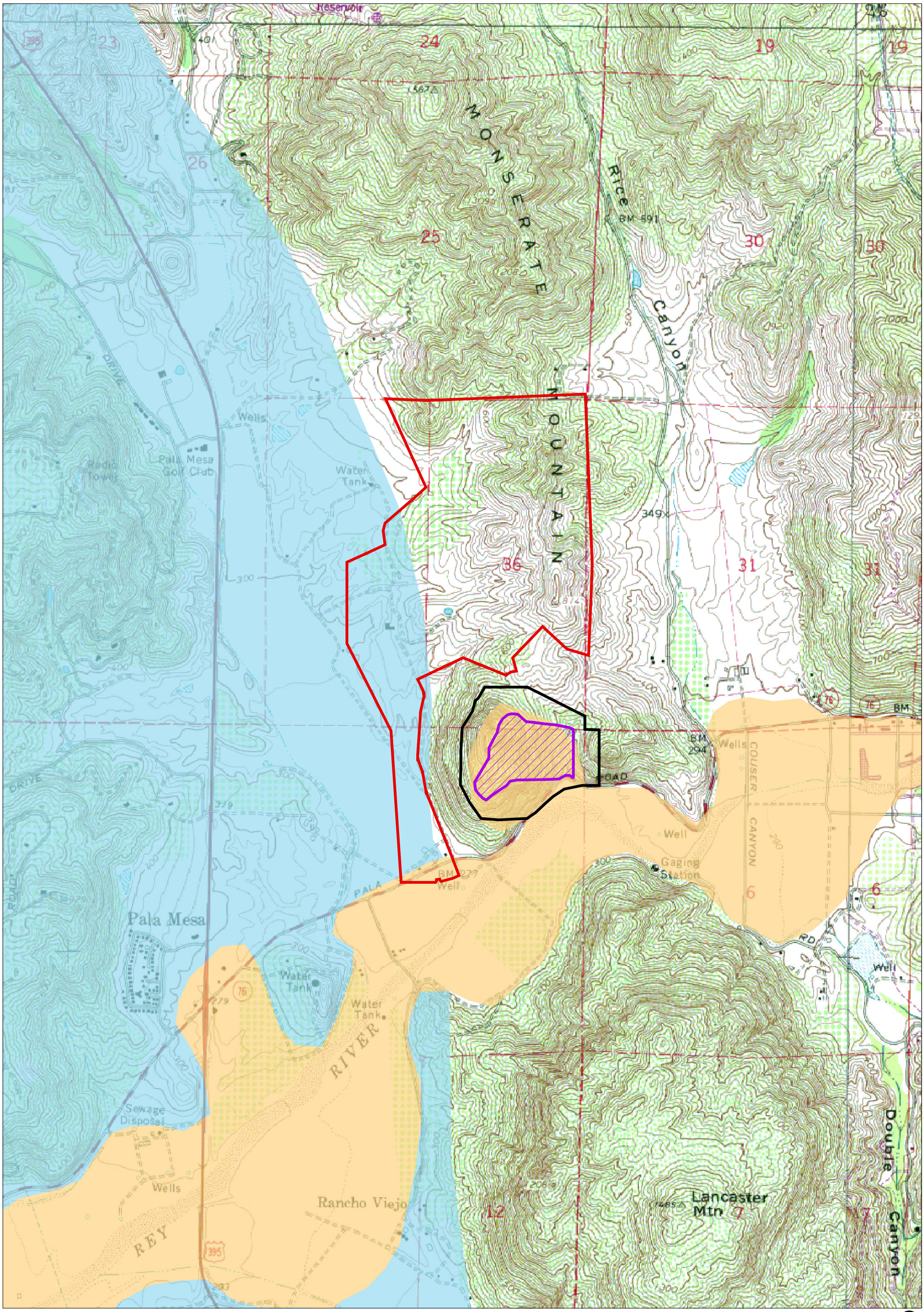
4.5.4 Conclusion

Implementation of the Proposed Project will not result in the future inaccessibility for recovery (extraction) of on-site or off-site mineral resources. Therefore, any loss of availability of a known mineral resource of value to the region and the residents of the state would be less than significant. Moreover, if the resources are not considered significant mineral deposits, loss of these resources cannot contribute to a potentially significant cumulative impact.

The on-site and off-site mineral resources within 1,300 feet of the Project Site mapped as MRZ-2 are considered minable, processable, and marketable since this resource is considered to be a PCC grade aggregate source, which would be of value to the region. However, the land use compatibility analysis indicates that the entire 39 acres of the Project Site and off-site MRZ-2 designated land is located on or within 1,300 feet of existing residential properties on the Project Site. Implementation of the Proposed Project would not result in any additional impacts. Therefore, impacts associated with the Proposed Project are less than significant.

The Proposed Project is also anticipated to impact approximately 13 acres of off-site MRZ-2 designated land on Rosemary's Mountain. However, the proposed quarry on Rosemary's Mountain would conduct all mining activities on the east facing slope of the mountain, which shields it from the Project Site. Therefore, the implementation of the Proposed Project impacts to the permitted mining activities on Rosemary's Mountain would be less than significant.

Map Source: USGS 7.5 minute topographic map series, BONSALL quadrangle



Proposed Project Boundary

Limits of Mining Boundary

Rosemary Mountain Quarry Property Boundary

Mineral Resource Zones

"Regionally Significant" MRZ-2 Aggregate Resource Areas

MRZ-3 Mineral Resources Potentially Present

FIGURE 4.5-1

Mineral Resources Within and Surrounding the Proposed Project

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4.6 Utilities

4.6.1 Existing Conditions

This section of the EIR addresses the provision of water and wastewater services required for project development addressed, as well as service providers and facilities needed to meet this demand. The following water and wastewater services technical reports were prepared and are attached as Appendices to the EIR: Meadowood Water Study (2009) (Appendix O-1); Water Supply Assessment and Verification (WSA&V) Report for the Meadowood Project (2009) (Appendix O-2) and Wastewater Service Alternative Analysis for Meadowood (2009) (Appendix O-3).

4.6.2 Existing Regulations

Senate Bills 610 and 221

The California Legislature has adopted legislation that addresses water supply planning efforts. The legislation, commonly referred to as Senate Bill 610 and Senate Bill 221, are now codified in Water Code §§10910-10914 and Government Code §§65867.5, 66455.3, and 66473.7 and became effective January 1, 2002. SB 610 mandates that the water supplier of a public water system, or, if no water supplier of a public water system is identified, the city or county, acting as the lead agency, shall be required to prepare a water supply assessment to be included in the environmental documentation for certain projects subject to CEQA, as specified in Water Code §10912. Under SB 221, approval by a city or county of certain residential subdivisions requires an approval of a WSA&V report.

San Diego County General Plan- Conservation Element

The County of San Diego General Plan (General Plan) recognizes that the continued growth and development of San Diego County is dependent on the availability of an adequate supply of potable water, and on the region's ability to treat and dispose of wastewater. San Diego County is almost entirely dependent upon imported water. Additionally, a major portion of San Diego County's treated wastewater is disposed of into the Pacific Ocean. Because of these facts, the General Plan includes a Conservation Element which sets policies pertaining to water and wastewater.

The General Plan Compliance Report for the Meadowood Project (Appendix L) contains a complete listing of the Conservation Element policies regarding water and wastewater and the Proposed Project's compliance with each. The following is a list of some of the policies applicable to the Proposed Project:

POLICY 3: The County shall support programs which assure an adequate supply and quality of water to meet the present and future population needs and to ensure this water is provided in concert with environmental and growth management policies.

POLICY 5: Water distribution systems should be designed and constructed to economically accommodate future use of reclaimed or desalinized water when technologically and economically feasible. Construction of such compatible distribution systems may be less costly than future costs of modifying existing systems to accommodate other water sources.

POLICY 11: The County will encourage projects which will promote the reclamation and reuse of wastewater. Such projects will be given funding priority in all water management programs.

POLICY 13: Decisions regarding the location, size, and timing of wastewater service extensions should be in conformance with adopted urban development policies contained in all elements of the General Plan and current growth policies. Sewer service expansion shall be coordinated with the extension of other needed services and facilities.

San Diego County General Plan- Public Facility Element

The primary goal of the Wastewater section of the Public Facility Element of the General Plan is to provide wastewater treatment and disposal capacity to adequately meet future demands. The General Plan seeks the "assurance that privately-proposed wastewater treatment plants are consistent with sewer master plans and meet the anticipated needs of the project and subregion." To meet this objective the Public Facility Element sets specific policies.

The General Plan Compliance Report for the Meadowood Project (Appendix L) contains a complete listing of the Public Facility Element policies regarding wastewater and the Proposed Project's compliance with each. The following is a list of some of the policies applicable to the Proposed Project.

POLICY 1.2: Discretionary land development projects will only be approved if the service provider reasonably expects that wastewater treatment and disposal will be available concurrent with need and that all appropriate requirements will be met through conditions placed on project approval.

POLICY 1.3: All land development projects requiring the use of sewage conveyance, treatment and disposal facilities shall obtain a commitment of service from the appropriate district prior to land preparation and construction.

POLICY 2.1: The County will regulate the use of privately proposed wastewater treatment plants to ensure that they are properly located (see, County of San Diego Board of Supervisors Policy I-78, below), meet the sewer needs of the project, do not cause premature urbanization and create no immitigable environmental effects. Availability of service from a wastewater treatment facility will not be justification for increasing densities allowed by the General Plan and zoning.

County of San Diego Board of Supervisors Policy I-78

The County Board of Supervisors adopted Policy I-78 for the purpose of establishing a policy relating to the approval of requested locations for on-site "small wastewater treatment facilities." "Small wastewater treatment facilities" is defined as a facility with a capacity of up to 2,000 equivalent dwelling units or approximately 0.48 million gallons per day. Pursuant to Policy I-78, prior to approving "small wastewater treatment facility" specific findings must be made (in addition to the findings pursuant to the Public Facility Element; however, Policy I-78 provides a waiver of the requirement to make these findings if the proposed facility will be operated by a public agency authorized to provide wastewater service).

County of San Diego Board of Supervisors Policy I-84

Board Policy I-84 was adopted to establish consistent procedures for using Project Facility Availability (PFA) forms and, in certain cases, Project Facility Commitment (PFC) forms, in the processing of land divisions and certain other projects requiring discretionary approval by the County. Specifically, the County General Plan requires that the County ensure that adequate facilities are available concurrent with need before giving final approval to projects. The policy generally requires PFA and/or PFC forms to be submitted at intake of a project; however, the significance is to assure that water, sewer and fire protection services are available prior to Final Map recordation and issuance of building permits.

Water Supply and Service

Metropolitan Water District of Southern California (MET)

The MET is a public agency that was formed in 1928 by state legislation for the purpose of developing, storing, and distributing water to the residents of southern California. MET's mission is to "to provide its service area with adequate and reliable supplies of high-quality water to meet present and future needs in an environmentally and economically responsible way" (Metropolitan 2005). MET currently receives imported water from two major sources: (1) Colorado River water via the Colorado River Aqueduct; and (2) State Water Project (SWP) water via the California Aqueduct, which is owned and operated by the Department of Water Resources.

MET's service area is nearly 5,200 square miles and includes portions of Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura Counties. Although only 13 percent of the land area of these six counties is within MET's service area, nearly 90 percent of the populations of those counties (approximately 16 million people) reside within its boundaries. MET is composed of 26 member agencies, including 14 cities, 10 MWDs, one utilities agency, and one county water authority. MET is a water wholesaler with no retail customers. Currently, member agencies receive treated and untreated water from MET at various delivery points. To aid in planning future water needs, member agencies advise MET of how much water they anticipate they will need during the next five years. In addition, MET works with its member agencies to forecast future water demand and develop emergency supply strategies to ensure a secure, long-term water supply.

On November 8, 2005, MET adopted its 2005 Regional Urban Water Management Plan (UWMP). MET's reliability assessment showed that MET can maintain reliable water supplies to meet projected demand through 2030. MET also identified buffer supplies, including other SWP groundwater storage and transfers that could serve to supply additional water needs.

San Diego County Water Authority (SDCWA)

SDCWA is a regional water wholesaler that was organized on June 9, 1944, and became a member of MET in 1946 in order to obtain a water supply from the Colorado River. The mission of SDCWA is to provide a "safe and reliable supply of water to its member agencies serving the San Diego region" (SDCWA 2005). SDCWA currently has 24 member agencies, which include six cities, five water districts, three irrigation

districts, eight municipal water districts, one public utility district, and one federal agency (military base). Its service area encompasses approximately 1,438 square miles (920,000 acres) and a population of approximately three million people.

SDCWA receives 72 percent of its imported water from MET. SDCWA is MET's largest member agency, purchasing up to 30 percent of MET's supplies annually, with the possibility that this amount could be reduced 21 percent in 2009. The remaining water supplies come from local water sources, including groundwater, local surface water, recycled water, seawater desalination and conservation. SDCWA has recognized that San Diego County must diversify its water supplies, thereby decreasing the percentage of imported water in the region's total supply mix. Currently, SDCWA is actively locating, evaluating, and developing new water sources that will help meet the county's needs, while striving to protect and enhance the region's sensitive ecosystem during construction and maintenance of vital water supply projects (SDCWA 2005).

In 2003, SDCWA began receiving water transfers from the Imperial Irrigation District pursuant to the Quantification Settlement Agreement (QSA). The QSA provides for the annual transfer of up to 200,000 acre-feet of water to the SDCWA. For 2009, SDCWA is pursuing one-year, spot water transfers with other California water districts for up to 50,000 acre-feet of transfers. Additionally, SDCWA has entered into a cooperation agreement with the San Juan District and the Santa Clara Valley Water District to develop a pilot dry-year water transfer program of up to 7,000 acre-feet. SDCWA has also developed emergency supply strategies to ensure a secure, long-term water supply for its member agencies.

Pertinent Regional Water Supply Plans

Both MET and SDCWA have developed plans that address long-term water supply demand, as well as catastrophic supply interruption and emergency storage. These plans are described below, and are hereby incorporated by reference into this EIR.

Metropolitan 2005 Urban Water Management Plan; Water Surplus and Drought Management Plan

The Urban Water Management Planning Act (the Act) requires all urban suppliers in the state to prepare UWMPs and update them every five years. In 2005, MET updated it's UWMP, which identifies water demand and supply capabilities of MET in order to evaluate long-term water supply reliability for its service region through the year 2030. Consistent with the Act requirements, the UWMP evaluates long-term water supply reliability via three planning tools: (1) a water supply reliability assessment; (2) a water shortage contingency plan; and (3) a plan to address catastrophic interruptions in water supplies. The outcome of these three planning processes included in the UWMP is discussed briefly below.

MET uses an Integrated Resource Planning (IRP) process to evaluate the supplies necessary to meet demands over at least a 20-year period in average, single year, and multi-year drought conditions. MET's available water supply and delivery patterns are influenced by factors such as environmental regulation, competition outside Southern California, and environmental factors. For example, the Colorado River Basin has experienced a five-year drought that is unprecedented in recorded history, impacting the amount of water available to MET from that source. However, the reliability analysis for

the IRP showed that MET can maintain reliable supplies under conditions that have existed in past dry periods through 2030 (UWMP 2005). MET has also identified additional groundwater storage and transfers that could serve to supply additional water needs. Table 4.6-1 summarizes MET's anticipated water supply sources and anticipated demand for the year 2030 (normal year estimate).

MET has also developed a Water Surplus and Drought Management Plan (WSDM Plan), which guides water supply operations in both surplus and shortage. In the WSDM Plan, MET outlines shortage actions in various stages, including actions needed to address up to a 50 percent reduction in MET's water supplies (as required by the Act). During shortages, MET will meet demands by relying on storage. In the stages of severe or extreme shortage, MET will take additional actions, such as issuing calls for public conservation, considering curtailment of interim agricultural deliveries, exercising water transfer options, or purchasing water on the open market. Through this management process, MET fully expects to be 100 percent reliable in meeting its demands throughout 2030 (UWMP 2005).

The UWMP outlines MET's Emergency Storage Requirements, which address actions necessary for catastrophic interruptions in water supply. The requirements are based on the potential of a natural disaster (e.g., an earthquake) damaging the imported water supply aqueducts, causing a 100 percent reduction in MET's water supply for six months (a greater period than required by the Act). Given this scenario, the emergency plan outlines a 25 percent cutback to member agencies and use of water stored in subsurface reservoirs and ground water basins under MET's interruptible program, as well as emergency reservoirs and other available storage. With the exception of few locations, MET can deliver water throughout its service area via gravity, which eliminates the dependence on power sources. Also included is a preliminary analysis of the potential effects of extensive levee failure in the San Francisco Bay Delta (which supplies water to the SWP). For the scenarios evaluated, the analysis showed that MET would be able to continue to provide water to its member agencies in the case of emergency interruption of water supply.

The UWMP also discusses other supply reliability risks, such as water quality issues and climate change. These types of supply risks are more uncertain and therefore are addressed more broadly. The amount of water at risk of potential water quality issues (e.g., contamination) is unknown. The IRP process includes a plan to identify a contingency supply buffer to address potential threats to water quality. Although the long-term effects of climate change are uncertain, MET is at the forefront of the issue by integrating climate change concerns into its IRP. The water supply planning portfolio for adapting to climate change includes conservation, groundwater conjunctive use, and storage and conveyance facilities.

SDCWA 2005 Urban Water Management Plan

In 2005, SDCWA also updated its UWMP, which identifies a variety of water resources projected to be developed through the year 2030 to ensure long-term water supply reliability for the region (SDCWA 2005). SDCWA's UWMP includes the required water supply reliability planning process (as described above for MET) to ensure a long-term water supply for its member agencies and address water shortage and catastrophic interruptions in supply.

Although SDCWA relies on a sole imported water supply from MET, MET has ensured long-term reliability through its UWMP and IRP planning process. In addition to imported water, SDCWA identifies supply goals for supplemental sources of water for the year 2030, including groundwater, recycled water, and seawater desalination. Through its imported water supply and identified supplemental water sources, SDCWA plans to meet the County's needs through the year 2030 (SDCWA 2005). Table 4.6-2 summarizes SDCWA's anticipated water supply sources and anticipated demand for the year 2030 (normal year estimate).

In the event of a drought, SDCWA does not anticipate a water shortage, assuming full implementation of MET's IRP process. However, SDCWA acknowledges that there is always some level of uncertainty associated with imported water, so it has developed a Drought Management Plan (DMP) to address potential supply shortages due to drought conditions (SDCWA 2005). Similar to MET's plan, the DMP identifies a series of actions to respond to different stages of drought, such as augmentation of supplies, promoting public conservation, and mandatory cutbacks of up to 50 percent in cases of severe drought.

SDCWA addresses the potential for a catastrophic water shortage through its Emergency Storage Project (ESP). The ESP is based on the premise that an earthquake or other disaster would eliminate connections to MET sources for up to six months. Under that scenario, a system of upgraded reservoirs, new connecting pipelines, and other facilities would work together to deliver water to SDCWA member agencies. ESP's include the completed Olivenhain Dam and the Olivenhain Pipeline as well as facilities currently under construction such as Lake Hodges Projects, San Vicente Pipeline, and San Vicente Dam Raise. The ESP is based on a 75 percent level of service to member agencies, as well as full implementation of water conservation BMPs. Elements of the ESP have been completed and some are currently under construction. The entire system is anticipated to be completed by 2012. When completed, the ESP will provide enough water to meet the County's needs through at least 2030 (SDCWA 2005).

SDCWA Regional Water Facilities Master Plan

SDCWA completed a Regional Water Facilities Master Plan (RWFMP) process in 2004 to define the regional facilities needed to meet water demands within SDCWA's service area through the year 2030. The RWFMP also evaluates water supply reliability and emergency storage to ensure a reliable and safe water supply for the service area. The RWFMP includes plans for expanding and rehabilitating existing facilities, as well as constructing new facilities (e.g., distribution pipelines, reservoirs, pump stations, WWTPs) to meet anticipated demand. The RWFMP also includes potential regional recycled water and seawater desalting facilities.

Regional Water Conservation and the California Urban Water Conservation Council's BMPs

The California Urban Water Conservation Council (CUWCC) was formed in 1991 through a MOU Regarding Urban Water Conservation in California. The urban BMPs for water conservation included in the MOU are intended to reduce California's long-term urban water demands. Both MET and SDCWA are signatory parties of the MOU, and have pledged to make a good faith attempt to implement the CUWCC urban water

conservation BMPs. Table 4.6-3 provides an overview of the CUWCC urban water conservation BMPs. Most SDCWA member agencies are signatories to the MOU and are required to submit biennial BMP reports to show compliance with the appropriate BMPs (SDCWA 2005).

Present Water Supply Planning and Discussion of Current Water Supply

On a monthly basis, MET provides to its Board an update on the regional water supply and demand conditions and potential actions under the Water Surplus and Drought Management Plan (WSDM Plan). The WSDM Plan provides the overall strategy for managing Metropolitan's resources to meet the range of estimated demands for the calendar year. The monthly report provides the status of its supplies from the State Water Project, Colorado River, MET storage, and storage/exchange programs to determine how to meet potential demands. There have been several water supply reliability challenges including the federal and state actions in the Delta area to protect certain fish species. These actions have reduced State Water Project pumping, and may do so further. Additionally, state storage reservoirs are below normal storage levels due to two consecutive years of dry conditions. In response to these concerns, in April 2008 MET developed with its member agencies a Five-Year Supply Plan to identify specific resource and conservation actions over the following five years to manage water deliveries under continued drought conditions and court-ordered restrictions. This Five-Year Supply Plan is in addition to MET's Integrated Water Resources Plan, to be revised in 2009, which addresses broader challenges associated with water supply such as population growth, increase competition for low-cost water supplies, variable weather conditions, and increased environmental regulation for clean and safe drinking water. The WSDM Plan provides an update on MET's Five-Year Supply Plan. Detailed background information on the State Water Project litigation and the California Plan and Quantification Settlement Agreement regarding Colorado River water use can be found in MET's *Appendix A,* attached to their January 15, 2009 Official Statement for $200,000,000 Water Revenue Bonds.

The Five-Year Supply Plan has identified new supplies for MET to consider in addition to the State Water Project and Colorado River on which it substantially relies. MET has demonstrated on a monthly basis in report to their Board, that firm demand on MET are able to be met by these sources along with utilization of its Water Surplus Drought Management Storage Portfolio.

The monthly reports to the Board provide an update on the impact that these items have on the water supply and strategic plan to meet demands, including discussion on the Department of Water Resources Snow Pack Surveys and Table A allocations. MET's most recent assessment of the current water supply condition can be found in the April 15, 2009 MET Board Action request from the Water Planning and Stewardship Committee, the April 13, 2009 MET Water Resources Management Semi-annual Report on State Water Project Initiatives, and the April 23, 2009 MET Water Resources Management information update on *Water Surplus and Drought Management Plan on water supply and demand as of April 23, 2009.* All of these items can be found at MET's website under the Board of Directors Board Letter Archive section.

For calendar year 2008, MET's State Water Project allocation was 35 percent of its contracted-for amount due to the critically dry conditions in the northern Sierra Mountains and projected impacts of court-ordered restrictions (e.g., reducing pumping in

the Delta area due to the delta smelt). In October 2008, the initial allocation for 2009 was announced to be 15 percent. On April 15, 2009, the Department of Water Resources announced that the allocation would be 30 percent and most recently on May 20, 2009 the Department of Water Resources increased the Table A allocation amount to 40%. This increase in State Water Project allocation decreased the quantity of water taken from the WSDW Storage Actions to meet MET's demands.

The SDCWA carries through activities at the MET level into reports to their Board. In April 2009, SDCWA staff provided to the Board the quarterly update on both the State Water Project and the Colorado River including the Water Authority's transfer with Imperial Irrigation District, the All-American and Coachella Canal Lining projects, and potential Colorado River supply augmentation projects. Key discussion can also be found in the April 15, 2009 information item on the *Fiscal Year 2010 Available Core Supplies* and April 15, 2009 action item background on *Approval of Shortage Management Actions in Response to Supply Cutbacks from Metropolitan Water District in Fiscal Year 2010*.

In response to the present water conditions, on April 23, 2009 the SDCWA declared Stage 3 Mandatory Cutbacks in water use of 8% and declared a drought response "Drought Alert" Level 2 Condition. The April 15, 2009 action item background on *Approval of Shortage Management Actions in Response to Supply Cutbacks from Metropolitan Water District in Fiscal Year 2010* provided the rationale for the 8% mandatory cutback in response to the potential water shortfall projected for 2010 (see Table 4.6-4 below). Within this analysis, the SDCWA assumed a supply from MET of 380,000 acre-feet for FY2010. Since that time, the SDCWA has increased the amount of supply it anticipates to receive from MET for FY2010 to 410,381 acre-feet (from the May 20, 2009 information item on *Drought Management Implementation Report)*. If all other elements of the calculation remained the same, the estimated regional shortfall would be approximately 3%. Additionally, note that the calculation of 410,381 acre-feet is based on MET's 30% Table A allocation rather than the most recent 40% Table A allocation.

Municipal Water Districts

The Proposed Project is partially within the SLRMWD and the remaining portion is not within the jurisdiction of any MWD, as shown on Figure 1-12. Although the Proposed Project is partially within the SLRMWD, however, the SLRMWD does not have legal authority to provide retail water or wastewater service. Although there are three MWDs in the area, retail water and/or wastewater service in the vicinity of the Proposed Project area is provided by only two MWDs:

- Rainbow Municipal Water District
- Valley Center Municipal Water District

The provision of water and sewer service to the Proposed Project would require modification of the existing Sphere of Influence (SOI) boundaries for the districts in the Proposed Project area as described in Chapter 1. A description of each MWD is provided below.

San Luis Rey Municipal Water District (SLRMWD)

The southern portion of the Project Site is located within the boundaries of the SLRMWD. The SLRMWD was formed on October 17, 1958, pursuant to the Municipal Water District Act of 1911 (California Water Code §§ 71000, *et seq.*). The SLRMWD encompasses approximately 3,000 acres along the San Luis Rey River Valley in northern San Diego County. The District is bounded on the west by I-15; on the east by the Pala Indian Reservation; on the north, west, and south by two member agencies of the SDCWA; RMWD to the north and west and VCMWD to the south.

The SLRMWD was formed with the principal mission to protect the groundwater that existing landowners pump from wells located in the San Luis Rey River Basin. The SLRMWD currently operates as a groundwater management agency, and does not provide retail water or wastewater services to any customers. There are currently no water or wastewater service providers within the SLRMWD boundary. All existing water use within the district is supplied by private wells accessing the subsurface flows of the San Luis Rey River. At this time the SLRMWD has no existing wastewater infrastructure to serve the Proposed Project. The SLRMWD is a participant in the LAFCO MSR/SOI study that will be prepared for the Bonsall and Pala Hydrological Subareas.

Rainbow Municipal Water District (RMWD)

The Project Site is outside but adjacent to the boundaries of the RMWD, which provides water and wastewater services to properties within its boundary. The RMWD was established in 1953 through a conglomeration of several mutual water companies under the Municipal Water District Act of 1911. The RMWD's 51,200-acre service area is located in northern San Diego County. It is approximately 40 miles north of the city of San Diego and 17 miles east of the Pacific Ocean. The northern boundary of the RMWD is coterminous with the San Diego/Riverside County border. The RMWD includes the unincorporated communities of Rainbow and Bonsall, as well as portions of Pala and Fallbrook.

The RMWD became a member of the SDCWA and MET in the same year to acquire the right to purchase and distribute imported water. The RMWD obtains 100 percent of its water supply from the SDCWA aqueduct system. The RMWD is a participant in the LAFCO MSR/SOI study that will be prepared for the Bonsall and Pala Hydrological Subareas.

The RMWD provides wastewater service within the unincorporated communities of Rainbow, Bonsall, and portions of Fallbrook and Pala. Wastewater generated within the RMWD is currently collected and subsequently transferred to the City of Oceanside through a trunk sewer main extending west along SR-76. This approximately 11-mile conveyance system consists of gravity pipelines, two lift stations, and force mains to transfer wastewater to the point of connection with the City of Oceanside's collection system located at the intersection of Stallion Drive and North River Road. The wastewater is treated at the San Luis Rey Wastewater Treatment Plant and discharged through an ocean outfall. The City of Oceanside currently is expanding its treatment facilities and may provide the district an additional 0.5 mgd of capacity. The RMWD has updated its Water Master Plan to evaluate preferred options, if any, for extending water service to the Proposed Project.

Valley Center Municipal Water District (VCMWD)

The Project Site is approximately one-half mile north of the existing northern boundary of the VCMWD. The VCMWD was founded on July 12, 1954, pursuant to the Municipal Water District Act of 1911. The VCMWD is a member agency of the SDCWA and obtains 100 percent of its supply from the SDCWA aqueduct system. The VCMWD encompasses approximately 64,253 acres (100 square miles), 59 percent of which currently receives water services. The VCMWD is bounded on the west by I-15, on the south by the city of Escondido and unincorporated areas, and to the north by the YMWD, Pala Indian Reservation, and the SLRMWD. The VCMWD provides water and sewer services to its domestic, agricultural, and commercial customers, with most of its water (86 percent) being used to irrigate citrus and avocado groves. The VCMWD also provides approximately 2,600 sewer connections that send wastewater to three VCMWD treatment facilities, none of which are adjacent to the Project Site. The VCMWD is a participant in the LAFCO MSR/SOI study that will be prepared for the Bonsall and Pala Hydrological Subareas.

4.6.3 Guidelines for the Determination of Significance

For the purpose of this EIR, the basis for the determination of the significance is the County of San Diego General Plan and CEQA Guidelines regarding adequate levels of service.

A project will have a significant adverse environmental effect related to utilities and service systems if:

1. The project's demand for potable water cannot be met with current projected water supplies and/or the demand for services requires significant alterations to existing water pipelines and infrastructure needed to convey potable water to the site.

2. The wastewater generated from the project cannot be treated by an existing or proposed facility, and/or the project requires significant alterations to existing wastewater systems and infrastructure.

4.6.4 Analysis of Project Effects and Determination as to Significance

Potable Water

A significant impact would occur if the demand for potable water cannot be met with current projected water supplies and/or the demand for services requires significant alterations to existing water pipelines and infrastructure needed to convey potable water to the Project Site.

As required by Senate Bills 610 and 221, a WSA&V Report was prepared to assess projected water demands for the Proposed Project. The water demands for the Proposed Project are summarized in Table 4.6-5. The water totals shown in Table 4.6-56 do not account for water conservation measures that would be implemented by the Proposed Project. Therefore, these totals represent a worst case scenario of estimated water demands. Additionally, construction of the school site is the preferred option over the development of 42 additional single-family residential units which could replace the school site. The school is estimated to generate a higher water demand and was used to

calculate the total projected water demand for the development. This ensures that the planned water facilities are adequate for either land use condition.

The Proposed Project will implement conservation measures and utilize non-potable water for irrigation purposes to reduce its potable water demand. In addition to reducing potable water demand through the above actions, the Proposed Project will further reduce its water demand by participating in offset programs or projects offered by the SDCWA or a MWD resulting in a net zero water demand on Water Authority supplies. The specific offset program(s) will be identified during the Sphere of Influence update process which will occur after approval of the Proposed Project.

Water Supply

As previously described, the Project Site would require annexation into a MWD for water service. LAFCO will conduct a Municipal Services Review (MSR) and SOI Update to determine the appropriate provider of water to the area which includes the Proposed Project. Specifically, LAFCO will examine the suitability of RMWD, SLRMWD, and VCMWD as potential service providers. Ultimately, annexation of the Proposed Project to a MWD will be required.

Regardless of the MWD selected, the source of water to the Project Site will be imported water via the SDCWA aqueducts. Therefore, annexation of the Project Site into the SDCWA is necessary in order for the Proposed Project to obtain water service. Generally, the SDCWA uses SANDAG regional growth forecasts to calculate future demands within its service areas. This ordinarily provides for consistency between San Diego County planning efforts and SDCWA demand projections, in an attempt to ensure that adequate supplies are being planned for existing and future water uses. In 2007, the SDCWA updated its *2005 Urban Water Management Plan* (UWMP 2007) to include the projected demands of areas which were pending annexation to the SDCWA. The areas pending annexation were included to provide a more comprehensive analysis of future water demands, as these areas were not included in the SANDAG population projections. The Proposed Project was explicitly identified as an area proposing annexation to the SDCWA. It states in its normal single dry and multiple dry year assessments that, “If the SDCWA and member agency supplies are developed as planned, along with implementation of MET’s IRP, no shortages are anticipated within the SDCWA’s service area in a normal year through 2030.” The SDCWA state the same on later pages regarding the single dry and multiple dry year assessments. Therefore, the Proposed Project’s water demands have been accounted for and included in the SDCWA’s long-term water planning. However since 2005, the following unforeseen water supply reliability challenges have occurred:

- A federal court ruling in 2007 on the delta smelt may result in as much as a 40% reduction of water from the State Water Project for Southern California.

- The State of California may be entering into a third year of drought which has caused water supply reserves throughout the State to plummet.

- It is anticipated that the Colorado River deliveries will continue to be reduced as that watershed continues to recover from record drought.

The SDCWA is mandated by law to update their UWMP in 2010 in which it will be required to take these changed circumstances into account. In the interim, the County will require that these changed circumstances be included to fully analyze pursuant to CEQA whether the project has a sufficient water supply available. The EIR must explain, how, given these factors, water is still available.

Water demands for the Proposed Project are based on the *Meadowood Water Study* (2009) included as Attachment O-2 and summarized in Table 4.6-5. This table represents the maximum potable water demand for the Proposed Project based on typical demand factors (water use rates) for the proposed land use type. As discussed above, the Proposed Project water demand was included in the 2007 *UWMP*, estimated in five-year increments over a 20-year period, as a project to be served by the SLRMWD, whose un-annexed area option was one of the areas proposing annexation at the time the 2007 *UWMP* was developed. Therefore, the SDCWA included the water demands forecasted for the Proposed Project because it was one of the areas/projects to be provided water within the SLRMWD annexation. The 2007 UWMP found that the projected potable water supply will meet the projected potable water demand of 715,450 acre-feet per year (af/y) in 2010 to 829,030 (af/y) in 2030. Based on dry year forecasts, the projected water supply will also meet the projected water demand during single and multiple dry year scenarios.

As detailed in the WSA&V, the water supply analysis through 2030 demonstrates that the SDCWA will be able to meet the normal, single, and multiple dry year demands of the Proposed Project. This demand calculation did not consider conservation by the Proposed Project and was based on all water demands, potable and non-potable, being met by SDCWA supplies.

The findings of the 2007 UWMP as verified by the WSA&V state that, independent of the LAFCO determination of the ultimate water service provider, an adequate supply of water is available from the SDCWA to serve the Proposed Project's demands in normal and dry year forecasts. Additionally, in actual development, the Proposed Project will implement conservation measures and utilize non-potable water for irrigation purposes to reduce its potable water demand. Examples of these water conservation features are discussed in the WSA&V. Regardless of the reduced water demand these actions yield, the Proposed Project will further reduce its water demand by participating in offset programs or projects offered by SDCWA or a MWD resulting in a net zero water demand on SDCWA water supplies. The specific offset program(s) will be identified during the sphere of influence update process which will occur after approval of the Proposed Project. Therefore, impacts associated with potable water supply would be **less than significant**.

Recycled Water Use

The Proposed Project will use recycled water for irrigation uses, as a means of reducing its need for imported water. Wastewater from the development will be tertiary treated to recycled water quality standards at the Proposed Project's on-site WWTP, and will be used on-site for irrigation of the Proposed Project's common area landscaping, HOA maintained slopes, park, school fields, and primary irrigation of the citrus and avocado groves. The WWTP will produce up to 0.225 mgd of recycled water. As detailed in the Water Study, recycled water use will reduce the Proposed Project's potable water demands by 25 percent.

Water Provider and Infrastructure

The appropriate provider of water services will be determined by LAFCO. Water facilities needed to serve the Proposed Project would vary depending on which MWD is selected. Each of the alternatives to be considered, along with the facilities needed, is described below.

Valley Center Municipal Water District

The SOI Update report evaluates the potential for the VCMWD to extend water and wastewater services to the areas that are currently within the boundaries of the SLRMWD. This would be the preferred scenario for the Proposed Project.

As part of this alternative, the VCMWD SOI would be revised to include the Proposed Project, including the northern portion of the Project Site, which currently is not within any of the three MWDs. Expansion of the VCMWD would require the following:

1. LAFCO approval of SOI expansion

2. LAFCO approval of annexation and detachment from SLRMWD

3. Annexation of planning areas to MET and SDCWA

4. Updating of the VCMWD's planning documents, such as CIP, Master Plan, and Urban Water Management Plan

5. Infrastructure development, as shown on Figures 1-13 and 1-14 and Table 1-3**.**

Based on projected demands and phasing considerations, the recommended water supply facilities for the VCMWD include:

- 2.5 cf/s flow control facilities

- 12-inch diameter water supply pipelines from aqueduct(s)

- 5 million gallons of treated water storage reservoir

- On-site pressure reducing station

The treated water storage reservoir will be sited at sufficient elevation to allow gravity service from the storage reservoir to the zones served, without need for pumping. The water storage reservoir would be located on the southern portion of the eastern ridgeline of the Project Site, as shown in Figure 1-5.

San Luis Rey Municipal Water District

The southern portion of the Project Site is located within the boundaries of the SLRMWD. Should this option be selected, the following actions would need to be implemented:

1. LAFCO activation of SLRMWD latent powers for water

2. LAFCO approval of SOI and boundary expansions

3. The SLRMWD becoming a member agency of SDCWA and MET, and annexation of the SLRMWD jurisdictional lands to SDCWA and MET

4. Annexation of planning areas into SDCWA and MET

5. Development of water infrastructure. Infrastructure required for SLRMWD would be the same as that described above for the VCMWD

Rainbow Municipal Water District

The Project Site is outside of, but adjacent to, the boundaries of the RMWD. Should this option be implemented, the following actions would be required:

1. LAFCO approval of SOI expansion

2. LAFCO approval of annexation and detachment from the SLRMWD

3. Annexation of planning areas to MET, SDCWA and the RMWD

4. Capacity increases of the existing RMWD facilities

5. Participation in the construction of extensive water infrastructure to serve the planning areas, as no infrastructure within the planning areas currently exists

The RMWD could provide water service to the Proposed Project site by utilizing RMWD's existing aqueduct turnouts and connecting the planning areas to the RMWD's existing distribution system. Implementation would require improvements to pipelines, transmission mains, and pressure reducing stations. Storage tanks would be developed for operational, fire flow, and emergency needs.

If water is supplied by the RMWD, the required facilities would consist of new transmission pipelines connecting to Rainbow's existing transmission pipelines, and may include the same water storage tanks. Unlike the SLRMWD or VCMWD options, service supplied by the RMWD would not require new connections to the First or Second aqueducts. Instead, water would be supplied to the development from the existing RMWD facilities. Should the RMWD option be chosen, water could be supplied to the Project Site via connection to one of three nearby connection points (see Figure 1-14). Details of the components are outlined in Chapter 1, Project Description.

Regardless of the MWD selected, the Proposed Project has included the construction of all necessary facilities for the provision of water service as part of the project design. There would be no outstanding need for alterations to pipelines or infrastructure. Therefore, impacts associated with the extension of facilities for water supply and service is **less than significant**. Additionally, the Proposed Project is in compliance with Board Policy I-84 requiring the submittal of a water service commitment letter. After

Board of Supervisors' approval of the Proposed Project applications, LAFCO will consider SOI changes that will identify the most logical and efficient MWD to provide water and recycled water services to the Project Site. The conditions of project approval will identify this process and ensure that the process occurs. Therefore, the Proposed Project will comply with the requirement to provide service commitment letters after project approval, specifically the forms will be required prior to recordation of a Final Map and issuance of building permits.

All on and off-site impacts associated with the construction of the preferred alignment of water supply facilities related to individual resource areas are detailed throughout Chapters 2 and 3, as follows: Aesthetics (Chapter 2.1), Air Quality (Chapter 2.2), Transportation/Traffic (Chapter 2.3), Biology (Chapter 3.1), Agriculture (Chapter 3.2), Cultural Resources (Chapter 3.4), Noise (Chapter 3.5), and Hazards (Chapter 3.6). Should the Proposed Project be required to construct the alternative alignment, supplemental environmental review will be required.

Wastewater

A significant impact would occur if the wastewater generated from the Proposed Project cannot be treated by an existing or proposed facility, and/or the Proposed Project requires significant alterations to existing wastewater systems and infrastructure.

Wastewater Generation

The Proposed Project is anticipated to generate approximately 0.225 mgd of wastewater. This flow is based on a wastewater generation estimate of 250 gallons per day per EDU as used by the VCMWD and RMWD.

Wastewater Provider and Infrastructure

Project plans call for LAFCO to determine which of the three MWDs (VCMWD, SLRMWD, or RMWD) can provide efficient and cost-effective services to the Proposed Project. Annexation of the entire Project Site would be required if either the VCMWD or RMWD is selected. If the SLRMWD is identified as the service provider, only the northern portion of the Project Site would require annexation. In addition, after LAFCO's SOI determination, wastewater facilities will be constructed. The Proposed Project includes an on-site WWTP, comprised of collection infrastructure, a new 0.225-mgd WWTP, treated water disposal, and recycled water infrastructure located on-site. Details of the proposed on-site WWTP and associated infrastructure are described in Chapter 1, Project Description.

The Proposed Project is in compliance with both Policy 1.2 and 1.3 of the Public Facility Element of the General Plan as well as Board Policy I-84. These policies require reasonable expectation that wastewater treatment and disposal will be available and requires conditions be placed on project approval to assure that all requirements are met and commitments secured. As discussed above, after approval of the Proposed Project, LAFCO will act to identify the most logical and efficient MWD to provide wastewater services to the Project Site. Therefore, the Proposed Project will comply with the requirement to provide a service commitment letter from the selected wastewater provider. Such will be prior to Final Map recordation and issuance of building permits.

Public Facility Element Policy 2.1 and Policy I-78 relate to the location, creation and operation of the proposed WWTP. The location and design of proposed WWTP for the Proposed Project must be approved and be consistent with the LAFCO selected MWD's reclaimed water master plan. With approval from the MWD, the Proposed Project would be consistent with these policies.

As described in Chapter 1.2.1, Project Component Parts, in the future, the designated operating MWD may require that the Proposed Project's WWTP be expanded to serve other projects in the area, and this could be accommodated, with off-site wet weather ponds. At this time, it can not be determined whether such a requirement will be made or the timing, siting or sizing of such a regional-serving WWTP. Thus, in the future, if the chosen MWD requires a single WWTP to serve the entire I-15/SR-76 quadrant, further environmental review will be required prior to approval. Under these circumstances, the applicant of the Proposed Project would then contribute funds (essentially a fairshare contribution) toward the construction of that expanded facility.

Because the proposed on-site WWTP meets current estimated wastewater generation and conforms to relevant policies, impacts associated with wastewater generation and treatment would be **less than significant**. All on and off-site impacts associated with the extension of water facilities related to individual resource areas are detailed throughout Chapters 2 and 3, as follows: Aesthetics (Chapter 2.1), Air Quality (Chapter 2.2), Transportation/Traffic (Chapter 2.3), Biology (Chapter 3.1), Agriculture (Chapter 3.2), Cultural Resources (Chapter 3.4), Noise (Chapter 3.5), and Hazards (Chapter 3.6).

4.6.5 Cumulative Impact Analysis

A cumulative demand for water and wastewater services exists in the project area due to planned development projects. Projections were developed based on the current San Diego County General Plan and the County's Draft General Plan Update. Projected water demand would total 0.48 mgd and wastewater flow would total 0.225 mgd.

Although there is a cumulative demand for water and wastewater services, this would not be a significant impact, as future services can be provided consistent with determination of district reorganization by LAFCO. Additionally, the WSA&V Report prepared for the Proposed Project concludes that there is sufficient water supply to serve the Proposed Project and the existing and other certain planned projects in the SDCWA area(s). Therefore, cumulative impacts associated with water use are **less than significant**.

4.6.6 Conclusions

Implementation of the Proposed Project requires annexation into one of three MWD that can potentially provide water and wastewater services. Upon the conclusion of the LAFCO MSR and SOI Update, an appropriate MWD will be selected to serve the Project Site. Because there is adequate water supply to serve the Proposed Project as determined by the WSA&V Report, and the Project design includes construction of all necessary facilities for provision of water service, direct and cumulative impacts associated with the extension of facilities for water supply and service are less than significant.

The Proposed Project will create a need for wastewater treatment services in an area not completely covered by a wastewater service district. The Proposed Project includes the construction of a WWTP and associated facilities which will have the capacity to serve the Proposed Project. Therefore, impacts associated with wastewater generation and treatment would be less than significant.

4.7 Effects Found Not Significant During Initial Study

The Initial Study found that every issue is potentially significant; therefore, all issues are addressed in this draft EIR.

TABLE 4.6-1
METROPOLITAN WATER SUPPLY CAPABILITY AND PROJECTED DEMANDS
(NORMAL YEAR)

Type of Supply	2030 Forecast (AF/yr)
Current Supplies	2,449,000
Supplies Under Development	205,000
Total MET Supply Capability	**2,654,000**
Firm Demands on MET	**2,246,000**
Potential Reserve and Replenishment Supplies	408,000

Source: Metropolitan 2005

TABLE 4.6-2
SDCWA WATER SUPPLY CAPABILITY AND PROJECTED DEMANDS
(NORMAL YEAR)

Type of Supply	2030 Forecast (AF/yr)
SDCWA Supplies (desalinated ocean water, transfers, and canal lining projects)	333,700
Member Agency Supplies (surface water, recycling, and groundwater)	138,408
MET Water District Supplies	356,922
Total Projected Supplies	829,030
Total Estimated Demands (with conservation)	**829,030**

Source: SDCWA 2005

TABLE 4.6-3
CALIFORNIA URBAN WATER CONSERVATION BEST MANAGEMENT PRACTICES AND SDCWA CONSERVATION PROGRAMS

BMP Number	BMP Description	Conservation Program (SDCWA)	Applicable to	
			Member Agencies	Metropolitan/ SDCWA
1	Residential Water Surveys	Residential Survey Program	Yes	No
2	Residential Plumbing Retrofits	Showerhead distribution	Yes	No
3	System Water Audits, Leak Detection	SDCWA and member agencies independently operate separate system audits	Yes	Yes
4	Metering and Commodity Rates	Member agencies operate	Yes	No
5	Large Landscape Audits	• Commercial Landscape Incentive Program • Landscape Assistance Program for Business and Home • Protector Del Agua (Spanish Language Commercial Landscape Incentive Program)	Yes	No
6	High Efficiency Washing (HEW) Machines	Residential HEW Voucher Program	Yes	No
7	Public Information	• Media Coverage • Xeriscape Awards • Website • Water Conservation Literature	Yes	Yes
8	School Education	• Classroom Presentations • Splash Science Mobile Lab • Youth Merit Badge Program • Magic Show • Teaching Garden • Mini-grants of up to $250	Yes	Yes
9	Commercial, Industrial, & Institutional	• CII Voucher Program • Industrial Process Improvement Program	Yes	No

TABLE 4.6-3
CALIFORNIA URBAN WATER CONSERVATION BEST MANAGEMENT PRACTICES AND SDCWA CONSERVATION PROGRAMS
(CONTINUED)

BMP Number	BMP Description	Conservation Program (SDCWA)	Applicable to	
			Member Agencies	Metropolitan/ SDCWA
10	Wholesale Agency Assistance	Ongoing	No	Yes
11	Conservation Pricing	Member agencies operate	Yes	Yes
12	Conservation Coordinator	Water Resources staff	Yes	Yes
13	Water Waste Prohibition	Member agencies operate	Yes	No
14	Residential Ultra Low Flow Toilet (ULFT) Replacements	Residential ULFT voucher program	Yes	No

Source: Metropolitan 2005; SDCWA 2005

TABLE 4.6-4
SUPPLY AND DEMAND ANALYSIS FOR FISCAL YEAR 2010[1]

	Estimated Quantity (AF)
Projected FY 2010 M&I Demands[2]	629,000
Core Supplies	
Estimated Metropolitan M&I Allocation	380,000 (TBD)[3]
QSA	155,000
Local Potable	30,000
Total Core Supplies	565,000
Estimated Regional Shortfall	*64,000 (10%)*
Dry-year Supplies	
2009 Transfer Supplies	16,000
Carry-over Supplies	0
Total Supplies	581,000
Estimated Regional Shortfall	48,000 (8%)

[1]Recycled water is not included in the analysis because it is not cutback in shortages

[2]FY 2010 projected demands based on escalated FY 07 demands, which are representative of dry-year demands prior to voluntary conservation.

[3]Final allocation quantity from Metropolitan is expected mid-May.

TABLE 4.6-5
SUMMARY OF WATER DEMANDS AND WATER DELIVERABLES

Land Use	Dwellings Units or Acres	Water Use Factor		Demand		
				gpd	mgd	ac-ft/yr
Single-family	355	500	gpd/DU	177,500	0.178	199
Multi-family	489	400	gpd/DU	195,600	0.196	219
Elementary School [1]	11.1	2,000	gpd/ac	22,200	0.022	25
Neighborhood Park [1]	8.5	2,000	gpd/ac	17,000	0.017	19
HOA Areas [2]	58.9	2,000	gpd/ac	117,800	0.118	132
R.O.W. Irrigation [3]	9.22	2,000	gpd/ac	18,440	0.018	21
Retained Groves [1]	49.3	3,570	gpd/ac	176,001	0.176	197
Natural Open Space [1]	128.5	--		--	--	--
TOTAL				**724,541**	**0.725**	**812**

[1] Water Demand acreage based on Area Acreage

[2] Water Demand acreage based on total HOA Area Acreage within each planning area

[3] Water Demand acreage based on 20% of total Road Area Acreage within each planning area

Source: *Meadowood Water Study* (Dexter Wilson Engineering, Inc., April 2009)